THE UNIVERSITY OF HULL INSTITUTE FOR LEARNING

THE COSTS AND BENEFITS OF TRAINING WITHIN THE POLICE SERVICE OF NORTHERN IRELAND

Being a Thesis for the Degree of Doctor of Philosophy
In the University of Hull

TIMOTHY PAUL MEAKLIM MEd (Hull)

CONTENTS

	Pag
Abstract	i
Acknowledgements	ii
Abbreviations	iii
List of Tables	iv
List of Figures	v
Chapter One Introduction	1
Organisational Change - A new context	1
Evaluation in a policing context	6
My personal commitment	8
Aims of study	10
Assumptions guiding the study	10
Layout and design of the thesis	12
Chapter Two Literature Review	14
Training as a context	14
Police Training	23

	Best Value	29
	Balanced Scorecard	30
	Evaluation	33
	Police Evaluation	55
	Analysing the costs and benefit ratio of training	59
	Phillips' Result Orientated HRD Model	66
	The KPMT Model	73
	The London Business School Approach	78
	Return on Training Investments – Non financial approach	79
	ROI as a fallacy	80
	Developing Costs and Benefits	81
	Analysis of costs and benefits within the police context	82
	Review	86
Chap	oter Three Methodology	87
	Introduction to research	87
	Developing a research design	92
	Originality	95
	Data gathering and choosing the methodology	96

Quantitative research	97
Disadvantages of quantitative methodology	99
Qualitative research	100
Disadvantages of qualitative methodology	102
Quantitative versus Qualitative	104
Validity	108
Reliability	109
Utility	112
Generalisation	112
Sampling	112
Ethics	114
Multiple methods	116
Triangulation	117
Design of this study	120
Methodologies for this study	121
Semi-structured interviews	125
Focus Groups	129
Questionnaires	135
Chosen methodologies	139

Chapter	Four	A Framework for Analysis	141
Th	e interviews		143
Cr	ticisms of Groun	nded Theory	152
An	alysis of the data	a from the Focus Group	154
Di	sadvantages of c	ut and paste	158
Th	e questionnaires		159
Su	mmary		161
Chapter	Five	Data Analysis	163
Ba	ckground interv	iews	164
Fo	cus Group		174
Qι	estionnaires		181
Se	mi-structured in	terviews	193
Su	mmary		239
Chapter	Six Refle	ctions and Models	241
Se	lf reflection		241
De	eveloping the mo	odel	252
So	ft Systems Meth	odology	259
Us	sing Soft System	s Methodology for the PSNI	265
Co	omments		276

Chapter Seven	Implementing the Model	277	
Awareness System			
Operationa	Operational System		
Monitor an	nd Control System	332	
Summary		336	
Chapter Eight	Implications for further research	339	
Implement	ation issues for the PSNI	342	
Implication	ns for further research	346	
Bibliography		349	
Appendix 1	Key Principles of the market research society Code of conduct.	362	
Appendix 2	The value of training – Questionnaire to Sub-Divisional Commanders	364	
Appendix 3	Interview Schedule for semi-structured interviews	367	
Appendix 4	Open Coding Theoretical Memo's	369	

ABSTRACT

This Thesis is concerned with developing a model of costs and benefits of training for the Police Service of Northern Ireland (PSNI). It is about the economics of Police Training, however it is intended that the end result will provide a model for use by non-economists. It is intended to provide a formula for use by those who practice planning, decision-making and management every day in our organisation. These people have responsibility for solving a most crucial problem in training: how to decide on good quality and relevant training interventions within limited resources. This study was seeking to discover a systematic process to help decision-makers see the various options and trade-offs available to them more clearly, and assess their relative merits and feasibility. It provides a model of Costs and Benefits, which includes three systems. An Awareness System that sets out the culture and understanding of the organisation so that the costs and benefits of training can be identified. The second system is the Operational System, this is the doing phase of the model and where the PSNI must identify the needs, identify how to achieve the training outputs and so deliver a quality product. The product must be fully evaluated to test its value and worth. All of these sub-systems need to be costed under a standard costing process. Once this information is available it will be possible to assess the value of the training against the identified costs. As it is intended that this model will be of practical use within training in the PSNI the third system is the Monitor and Control System; this is the maintenance phase. It provides proper monitoring of activities in the other systems, clearly defined measures of success, and reviewing of the actions to ensure that the model is a living process, always trying to develop and improve.

ACKNOWLEDGEMENTS

This Thesis is dedicated to the memory of Doctor A. Ghazzali. He was an exceptional academic and a great friend. He will be sadly missed.

Thanks and appreciation are due to many people for the help and encouragement received. To staff at the University of Hull for their advice and guidance during the preparation of this dissertation.

To members of the Royal Ulster Constabulary (George Cross), the Police Service of Northern Ireland and other police services who took time to complete questionnaires, be interviewed and for their participation in this research.

To Tom Wiggins for his support and co-operation. To Doctor Phil Clements for his critical judgement. To Scottie Addison, Staff Officer to Her Majesty's Inspector of Constabulary for Training, for his constructive comments.

Finally to my wife, Eileen, for her meticulous scrutiny and continual support without which I would not have been able to complete this work and to my children who were very patient when I was working on the computer.

ABBREVIATIONS

ACPO Association of Chief Police Officers

APA Association of Police Authorities

ASTD American Society of Training and Development

CIO Context Input Outcomes

CIRO Context Input Reactions Outcomes

CAIPO Context Administration Input Process Outcomes

HOC Home Office Circular

HMIC Her Majesty's Inspector of Constabulary

HR Human Resources

HRD Human Resource Development

HQ Headquarters

KPMT Kearns Paul and Miller Tony, (a model of evaluation)

LBS London Business School

NA Needs Analysis

NI Northern Ireland

OSPRE Objective Structured Performance Related Examination

PA Performance Analysis

PANI Police Authority for Northern Ireland

PDR Performance Development Review

PSNI Police Service of Northern Ireland

ROI Return on Investment

RUC Royal Ulster Constabulary

TED Training Education and Development

TNA Training Needs Analysis

List of Tables

		Page
Table 1	Implementation of Kirkpatrick's 4 level model	45
Table 2	Summary of levels of evaluation	49
Table 3	Phillips' Results-Based HRD Model	67
Table 4	KPMT 9-step model	74
Table 5	Methods of quantitative research	98
Table 6	Spread of roles for interviews	194
Table 7	Saturated codes for the interviews	199
Table 8	Paradigms and models	258

List of Figures

		Page
Figure 1	How does an organisation benefit from Training 'Kat' by Kildane Habite.	17
Figure 2	The training wheel	21
Figure 3	Kirkpatrick's four level model	43
Figure 4	Easterby-Smith evaluation model	47
Figure 5	Checkland's methodology outline in summary	265
Figure 6	Rich picture for PSNI	268
Figure 7	The process of modelling in SSM	273
Figure 8	The conceptual model for PSNI	274
Figure 9	The Awareness System	279
Figure 10	The Operational System	290
Figure 11	Training Assessment Model	292
Figure 12	The Monitor and Control System	332
Figure 13	The conceptual model for PSNI	338

CHAPTER ONE

INTRODUCTION

This Chapter presents a short introduction to this study, providing a background as to why the costs and benefits of training are important in the context of the Police Service of Northern Ireland (PSNI). It endeavours to give the reader an appreciation of why I chose to undertake this study and why I saw this as a suitable subject for a PhD. It therefore provides the foundations for the whole thesis.

Organisational Change - A new context

Policing, as with any other interaction with society does not take place in a vacuum. The concept of policing cannot survive if that service is a stagnant organisation in terms of its outlook and the way that it sets about translating into practice that concept we call policing. It is the pace and the extent of change in policing which over the last number of years have marked policing in Northern Ireland as being set apart to some degree from its counterparts in the rest of the United Kingdom. As an organisation it has seen its full-time police numbers increase from around 3,200 in 1968 to its current level of 11,500 by 1986

(Brewer 1988¹). This represents a ratio of police to population approaching 7 per 1,000, which by international standards is high. These changes have required the development of structures and the support of programmes for recruitment, appointments, promotions, training and development through Human Resource management. Even the name of the police organisation has changed from the Royal Ulster Constabulary (RUC) to the Police Service of Northern Ireland. However, the PSNI is poised for new change as the report of the Independent Commission on Policing for Northern Ireland is translated into reality through the Police (Northern Ireland) Act 2000. It now faces a reduction in resources to a police service of 7,500 in a new post-terrorist era. As Superintendent Billy Brown Chairman of the RUC Superintendents Association stated in 1999 in the RUC Newspaper, Callsign: -

> "We are now at the start of a lengthy process of organisational change, change which will ultimately lead to transformation. It is essential that our organisation keeps pace with the changes which are taking place in the society we serve. Modern day society is all about change. Our aim is to create a dynamic organisation which will continuously evolve." 2

These changes will affect all of the structures and resources of the service and create a new effective police service which 'can enjoy widespread support from, and is seen as an integral part of, the community as a whole.'3 Of course the

³ The Agreement of April 1998

Brewer, J. Guelke, A. Hume, I. Moxon-Browne, E. Wilford, R. (1988) The Police Public Order & The State. Policing in Great Britain, Northern Ireland, The Irish Republic, The USA, Isreal, South Africa and China. London: Macmillian Press. PP.55-56.

Callsign. The Official Newspaper of the RUC, Issue 9 January 1999.

Police Service of Northern Ireland like any other large organisation is under close scrutiny to ensure it is effectively and efficiently run, this focus is likely to be sharpened in the current political climate of Northern Ireland. As the Report of the Independent Commission on Policing for Northern Ireland stated: -

'The Police in Northern Ireland costs the taxpayer more than £600 million per year. The size of this budget and the importance of getting good value for public money call for both good management within the police service and for close, expert scrutiny by those responsible for holding the police accountable. ⁴

All organisations are subject to continuous stimuli for action. At one end of the spectrum is the proactive, planned pressure of the business strategy. At the other end is the knee-jerk reaction to unforeseen and unexpected pressures. In response to the planned pressures - internal and external -many organisations these days have mission statements, goals and objectives and some plan of how to achieve them within both short-term and long-term horizons. We all live in an uncertain and dynamic world. Our five-year, through to one-week plans, may come to nothing in the face of the organisation responding to the multitude of pressures upon it. Managing rapid change, be it through consolidation, growth, contradiction and/or closure, will be the mainstay of managers in the future. 'Faced with such rapid change organisations need to develop a more focused and coherent approach to managing people.'5

⁴ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999)

A New Reginning: Policing in Northern Ireland, HMSO, P. 26

A New Beginning: Policing in Northern Ireland. HMSO. P. 26.
⁵ Ross, N. Thomas, M. and Turner, B. (1991) The Shorter MBA. A Practical Approach to Business Skills.. London: Harper Collins P.126.

As Training Professionals, we need to recognise this and be able to work with it. But how does such change affect the Training Professional? The word that springs to my mind is *opportunity*. As Jones states, "...the key skill for all trainers is the ability to exploit and develop opportunities they are offered...and they will become more effective in helping their organisations to change." Change, of whatever nature, arising from planned or unplanned business needs is a golden opportunity for the Training Professional to get involved. It is vital to make sure that training is at the forefront of the organisation in knowing both what is going on now and what changes are on the horizon. The Independent Commission on Policing for Northern Ireland identified this when they stated: -

'... we have made recommendations for radical transformation of the policing service in Northern Ireland. The training, education and development of police officers and civilian staff will be critical to the success of this transformation."

Nouwens and Robinson (1991)⁸ see the Police as an institution with an open boundary and with continual interaction between the institution and its environment. This suggests that change in the environment must lead to processes that define a new image and new territories for the operation of the institution. An effective response to this new environment will be made by those who can productively adapt their internal subsystems to the new environment

⁶ Jones, J. A. G. (1988) *Improving Trainer Effectiveness*. Editor Roger Bennett., New York. Kogan Page P.115.

⁷ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999)

A New Beginning: Policing in Northern Ireland. HMSO. P.91

Nouwens, F. and Robinson, P. (1991) Evaluation and the development of quality learning materials. Australian Journal of Educational Technology, 7(2), PP.93-116.

and simultaneously develop a new equilibrium between the organisation and the public. The new police service in Northern Ireland is faced with the challenge of major changes in the society it serves with new political institutions and community confidence.

Buckley and Caple (1992)⁹ state that in order to survive and to operate effectively, all types of organisations must adopt and respond in a timely and flexible way to technical, economic and social changes. Juran (1989)¹⁰ suggests that improvement of quality requires institutions in their strategic plans: -

- to identify specific quality goals;
- to allocate resources for their attainment;
- to generate commitment to these goals and to bring about organisational development required to achieve them.

These strategic goals can be translated into more specific goals for the four organisational sub-systems, which he describes as tasks, structures, people and technology.

⁹ Buckley, R. and Caple, J. (1992), *The Theory and Practice Of Training* (2 nd Ed). London: Kogan Page, P. 9.

¹⁰ Juran, J. M. (1989). Juran on leadership for quality. New York: The Free Press.

Evaluation in a policing context

In April 1999 Her Majesty's Inspector of Constabulary (HMIC) produced a report on police training in England and Wales¹¹ which contained several serious criticisms of the way in which training was managed and delivered. Very few police services had any real idea of the cost of their training programmes; training estates were inadequately managed; only a handful of police services had training strategies, or linked training requirements to police objectives; and almost none of them had systems for evaluating the success or failure of the training courses they were running. The Independent Commission¹² stated that many of the observations made in that report could also be applied to training in the RUC. During the halcyon years when police training budgets were expanding rapidly, the main question for policy makers was how to best allocate the sizeable annual budget among different educational levels and uses. With training budgets being cut and the introduction of best value, the big question is how best to target training so as to find ways to use limited resources more effectively and efficiently. Best Value is a legal obligation on public services in England and Wales under the Local government Act 1999. Northern Ireland is not bound by this Act, however, implementation of Part IV of the Police (Northern Ireland) Act 2000 will mean that the Police Service in Northern Ireland will have to abide by the key principles of Economy, Efficiency and

Managing Learning: A Study of Police training, 1999. London: Donnelly-Pindar.

Effectiveness. Examining the costs and benefits of training is vital if organisations are to meet these challenges.

The analysis to determine the costs and benefits normally begins with some question or problem. Typical questions are: -

- How can we increase the annual training to meet some anticipated future demand without greatly increasing the training expenditures?
- How can we improve a certain dimension of job performance?
- Should we begin using a new technique or technology in our training?
- What would be the effects of reducing the training budget or eliminating certain training?
- How much would it cost to provide training for new legislation and what is the best way to do it?
- What's wrong with our current training system or a particular training event?

In other words, what are the benefits to the organisation through cost savings, reduced error rates or improvements in quality? The questions may not be in a general form as those above. Instead, they may be phrased in terms of the specific details of the police organisation or training setting. What the analysis can do is help decision-makers see the various options and trade-offs available to them more clearly, and assess their relative merits and feasibility. It can reveal possible advantages of deploying different levels and types of training for police officers, between different categories of inputs, and between different duty types.

In addition, identifying the cost and benefit of training is essential for testing the economic feasibility of broad training plans, of specific project plans and proposed innovations. It can therefore allow policy makers to seize important opportunities, and to avoid heading off in superficially attractive directions that turn out to be dead ends.

My personal commitment

The field of training and evaluation has been the context of my professional experience over the past ten years. This developed into a strong academic interest over the past six years. The experiences have included being one of the first evaluators in the RUC, researching and developing new approaches to evaluation, and training others in good practice evaluation techniques. This doctoral study provides the opportunity to bring together a number of strands of my professional development and to push forward the boundaries of my academic knowledge and interest in evaluation. The progress of evaluation within the police service has not been uniform, initial impetus in the early 1990's (Home Office Circular 105/91¹³) was not sufficiently built upon, leading to validation of training rather than evaluation of outcomes. This will be further expanded upon in Chapter Two.

¹³ Home Office, *The Evaluation of Training in the Police Service*. Home Office Circular 105/1991, London: HMSO.

My academic interest was developed during my studies for a Masters of Education and my thesis on evaluation of the initial training of Traffic Wardens within the RUC¹⁴. This provided me with the opportunity to examine Training Needs, course design and evaluation up to level three of Kirkpatrick's¹⁵ model of evaluation. As stated by B1 in the background interviews reported in Chapter Five, this is still the furthest boundary of evaluation within the PSNI.

"The Evaluation Unit are able to provide satisfaction ratings of the training, the knowledge provided by the training, and behavioural change through the transference of the learning to the workplace." B1

I believe that it is now time to push this boundary forward and provide a clear model which can be applied in the real world of policing within Northern Ireland. My own experience of evaluation is that it is a powerful tool that can benefit the training process and provide designers, trainers and customers with information to greatly improve the product. This thesis represents research into an area which not only has a deep interest for me, but, as stated earlier has recently seen a revival of interest because of Best Value, and in Northern Ireland because of the Patton Report and the Training Education and Development Review.

¹⁵ Kirkpatrick, Donald, L (1994) Evaluating Training programs: The four levels. CA: Berrett-Koehler.

¹⁴ Meaklim, T. (1997) An Evaluation of the Initial training of Traffic Wardens within the Royal Ulster Constabulary, Unpublished Disertation: The University of Hull.

Aims of study

In view of the above the aims of this study are: -

- To examine existing systems and processes into the costs and benefits of training (reviewed in Chapter Two).
- 2. To carry out research using various methodological approaches (described in Chapter Three and Four) to identify the needs of the organisation in respect of the costs and benefits of training (reported in Chapter Five).
- 3. To develop a logical model for identifying the costs and benefits of training within the PSNI (developed in Chapter Six and reported in Chapter Seven).

This study is therefore about the economics of police training, however, it is intended that the end result will provide a model for use by non-economists. It is intended to provide a formula for use by those who practise planning, decision-making and management every day in our organisation. These people have responsibility for solving a most crucial problem in training: how to decide on good quality and relevant training interventions within limited resources.

Assumptions guiding the study

The work of this research is restricted in the main to the experience within Northern Ireland, however, as I explain in Chapter Two, guidance from the

Home Office is issued to all police forces in England, Wales and Northern Ireland. It therefore should be possible with some adjustments for this research to be applied to police forces within England and Wales.

In Chapter Five, I discuss the findings of the background interviews that were carried out to set the organisational context for training within the RUC / PSNI.

The main issues that arose from these interviews were: -

- 1. There are links between Force Strategy and the Human Resources Function, but it is not as strong as management would wish.
- 2. The current staff appraisal and development review system are ineffective in identifying training needs or in its general linkage to the training process.
- 3. There is an acceptance that training Needs Analysis and evaluation are important to the organisation and need to be carried out if training is to be a success.
- 4. There is currently no process to test if training benefits the organisation in a cost effective way.
- 5. Only 'ball park' figures are currently available for the costs of training, although the mechanisms exist to fully cost the units involved in police training in Northern Ireland.
- 6. Some training within the RUC is run because of the social benefits accrued or the social cost of not training, (e.g., disaster training for an aircraft crash).

- 7. Currently evaluations within the RUC are started after Training has commenced, and they check if the outcomes have met the objectives set for training.
- 8. Evaluations are currently undertaken to Kirkpatrick level 3¹⁶, this involves testing reactions, learning and behavioural change through transference of learning to the workplace.

These issues all set the scene for the study I intend to undertake, many of the issues will be developed through the review of literature in Chapter Two and then within the main data collection and analysis in Chapter Five.

Layout and design of the thesis

The research design is based upon a number of confirmation points, each of which sustain the other, these are: -

Chapter One has tried to place this research study into an initial context. It has provided an insight into its rationale, my commitment, the aims of the study, the assumptions made, and the layout of the thesis.

In Chapter Two I will provide a discussion on the relevant literature. The information collected from the literature review will provide the theoretical

¹⁶ Ibid.

context to the phenomenon to be investigated empirically and later for the devising of a model.

In Chapters Three, Four and Five, I will examine Empirical Data arrived at through properly considered methodology, data analysis and data collection.

In Chapters Six and Seven, I will construct a convincing and relevant model for identifying the costs and benefits of training within the PSNI.

Therefore, the literature informs method, method informs empirical investigation and analysis, which in turn, informs the model. I have also included an additional chapter which links backwards through the study and forward to new research following from this study entitled Implications for further research (Chapter Eight).

CHAPTER TWO

LITERATURE REVIEW

In Chapter One I gave an introduction to the research and the background to the study. In Chapter Two I will provide a discussion on the relevant literature in an attempt to: -

- Set the scene and offer a commentary on the development of evaluation to the level of examining the costs and benefits of training.
- 2. Draw out the nature and scope of the costs and benefits of training.

This review of the literature will provide the contextual basis and perspective for the research, give a link to the analysis of the study results in Chapter Five and support the building of a model of costs and benefits of training within the PSNI in Chapter Six and Seven.

Training as a Context

The pre-eminence of knowledge and skills as the sources of wealth creation and economic growth is one of the major issues in business at the beginning of the 21st Century. As a result, Human Resource Development (HRD) has been

propelled into a central role in management thinking. However, this has not always been reflected in practice, since many of the methodologies for monitoring and assessment continue to reflect the previous importance of fixed capital and the quantity of labour employed. The central importance of HRD in the modern economy is expressed by Eliasson (1994)¹⁷ who states that: -

"Human competence dominates economic performance at all levels. Its hallmark is heterogeneity to the extent that in each agent certain dimensions of it are unique and not (directly) immutable or communicable." (P.177)

As discussed in Chapter One, the PSNI is undergoing immense internal change, training is one way that an organisation can respond to such changes. Within the PSNI the training mission statement is stated as: -

"To provide quality training which meets the needs of the organisation and the individual so that officers are equipped to provide an effective and impartial policing service to all the people of Northern Ireland." 18

The values and principles of the PSNI states: -

"We will ensure that the resources allocated to training are used in such a way as to provide value for money and that all training is subject to evaluation." 19

This approach was supported by the then Police Authority. Mr Pat Armstrong, Chairman of Police Authority to Northern Ireland, speaking on Tuesday 1st

19 Ibid.

¹⁷ Eliasson, G. (1994) The Theory of the Firm and the Theory of Economic Growth. In Magnusson (Ed) *Evolutionary and Neo-Schumpeterian Approaches to Economics*. London: Kluwer. PP.173-201.

¹⁸ RUC Training Branch Strategic Plan 1998-2001.

December 1998 on the Good Morning Ulster Programme, BBC Radio Ulster, in relation to the Police Authority submission to the Independent Commission on Policing in Northern Ireland, he stated: -

"There must be comprehensive training available to all members of the police service to assist in the progress towards a peacetime approach to policing."

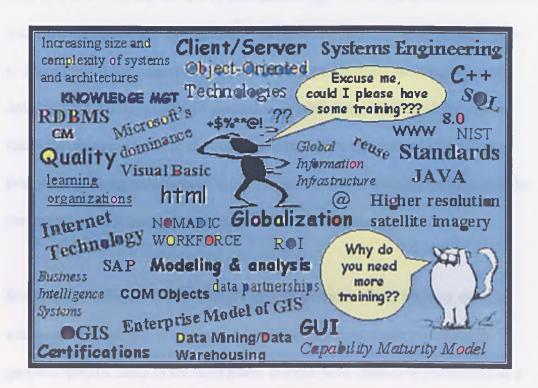
Mayo and Dubois (1987)²⁰ have quoted William Mahee's (1979) definition of training as: -

"...the formal procedures which a company utilises to facilitate learning so that the resultant behaviour contributes to the attainment of the company's goals and objectives."

But a common question that arises is why do individuals and organisations need training interventions. A simple view is illustrated by Figure 1, which shows that there is a vast amount of change and development in the world and training can help meet some of the demand to understand these new concepts.

²⁰ Mayo, G. D. & Dubois, P. H. (1987), The complete book of Training: Theory, Principles and Techniques. London: University Associates. P.3.

Figure 1. How does an organisation benefit from training? "Kat" by Kidane Habte.²¹



Pepper (1992)²² claims that training is the organised process concerned with the acquisition of capability or the maintenance of existing capability. Lord Young, cited in Kenney and Reid (1986)²³, as Secretary of State for Employment, said –

'Training should be an integral part of the work and development of any company or organisation, large or small. After all, a company's human resources are among its most important assets and the skills and motivation of its workers can be crucial to its success. We all need to recognise that training is not a luxury, but a necessity.'

²² Pepper, A. D. (1992), *Managing the Training and Development*, London: Gower Publishing. P 3

²¹ www.esri.com/library/userconf/proc99

²³ Kenney, J. & Reid, M. A. (1986), *Training Interventions*, Institute of Personnel Management. P.XI.

Pepper (1992)²⁴ talks of training being an integral part of the organisation, to be seen as a service in the same way that accounting, recruiting, office management and other functions of a similar nature are seen. Kenney and Reid (1988)²⁵ point to Jones (1982) who asserts that there is no single approach to a training and development problem that will guarantee a satisfactory solution. He suggests that 4 variables are critical; the organisations culture and values; its goals and priorities; the responsiveness of the organisation and its training systems and the perception and abilities of trainers.

Brown and Hickey, (1990)²⁶ contend that the purpose of any training system within an organisation is to produce a trained person who can successfully perform specific tasks in the workplace. If these tasks cannot be performed to a required standard, then the training has failed. In fact, the quality control process of ensuring that a particular course meets the job requirements by investigating the trained person on the job is arguably the most important phase in a training system. Any necessary corrective measures will be concerned with the effectiveness of the training.

A systems approach to training provides a suitable framework to effectively manage and implement training. A job is analysed, a course designed and

²⁴ Op.Cit. P.8.

²⁵ Kenney J. and Reid M. (1988), Training Interventions, London: McGraw Hill.

²⁶ Peter Brown and Michael Hickey, (1990). Validation - Cost Effective External Evaluation Australian Journal of Educational Technology, 6(2), PP. 92-98.

conducted and then the trainees perform the instructed tasks, on the job. Quality control of this 'training loop' is essential through evaluation and validation. Bee and Bee (1994)²⁷ take the view that training should be driven by the business needs of the organisation and its success measured by whether it has helped to address those business needs. Organisations such as the PSNI are embedded in both an external environment and a number of differing internal environments which impact on the achievement of its goals and drive the business in terms of both planned and unplanned needs.

As Bramley (1990)²⁸ states suitable models of training should be identified to ensure organisational change combined with learning rather than the more traditional approach of training the individual. Buckley and Caple (1992)²⁹ advocate that the assessment of training needs should be considered from the top of the organisation downwards rather than being a mainly individual orientated bottom - upwards process. They argue that the training should not be for the individual in the hope it will benefit the organisation, but for the organisation and this will benefit the individuals. As the research findings in Chapter Five show, such an approach would hit at the very heart of our training culture. But is clear that we must adopt a macro perspective thereby accepting training as an integral part of the organisation system.

²⁷ Bee F. & Bee R. (1994) *Training needs analysis and Evaluation*. London: Institute of Personnel Management

²⁸ Bramley, P (1990), Evaluating Trainer Effectiveness, Translating Theory into practice. Maidenhead: McGraw - Hill

²⁹ Buckley, R and Caple, J. (1992), *The Theory and Practice Of Training* (2 nd Ed). London: Kogan Page.

Williams (1998)³⁰ uses a 4- stage systematic approach to training: defining the training needs; deciding what sort of training is required to satisfy these needs; using experienced trainers to plan and implement training; and, follow up and evaluation of the training to ensure that it is effective. Pepper (1992)³¹ on the other hand advocated 5 stages of training: identification of the training need; specification of the steps to be taken and the methods to be used to meet the need; detailed design of the specific training activities; conduct of the training so designed; and evaluation of the impact of the training on the trainees and the organisation.

A simplified version of the 'Training Wheel' proposed by Bee and Bee (1994)³² presents a convenient way of conceptualising a systems approach to training which is driven by business needs (Figure 2). In such an organisational approach, efficient training design is vital. Two core processes reinforce each other here: defining the training objectives on which the learning activities will be based and setting criteria by which the activities can be evaluated. Such an approach was advocated by Newby (1992)³³.

Newby states that good design places the premium upon behavioural change rather than awareness objectives and therefore the end product can be clearly

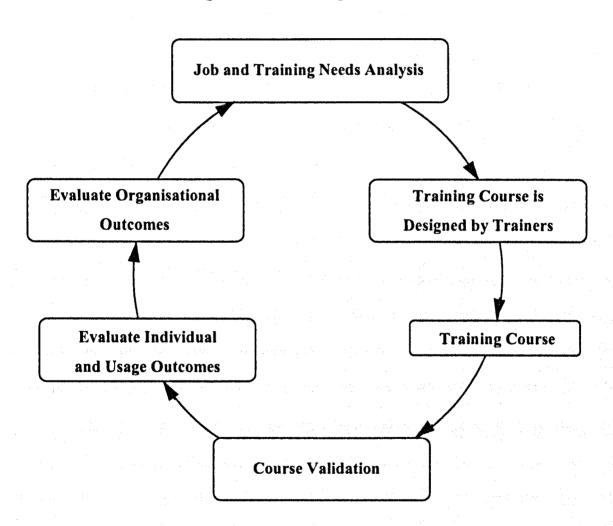
³⁰ Williams, B. (1998) Learning Needs Analysis. Cambridge: Fenman Ltd. PP 1-6 to 1-15.

³¹ Managing the Training and Development, Op. Cit. P.3.

Op. Cit. P.XVI.
 Newby, A. C. (1992), Training Evaluation Handbook. Aldershot: Gower. P.33.

specified training objectives with observable outcomes. Such design has obvious economy of effort when design of objectives and design of evaluation measures proceed hand-in-hand. As such it is less costly in design time and yields more fruitful information to build evaluation into training design from the beginning, rather than add it on as an afterthought.

Figure 2. The training wheel.



It perhaps seems self-evident or, indeed, glaringly obvious that business needs (defined as the operational needs of the organisation whether in the for-profit or not-for-profit sectors) should be the starting point for any training initiative.

Boam and Sparrow (1992)³⁴ refer to the *strategic triggers* that cause managers to take a look at the skills and competencies of the work force. However, many training departments appear to be organised around the preparation and delivery of a catalogue of training courses. As Kuraitis (1981)³⁵ states: -

"It may be argued that it is this approach to training which has led to the scepticism of senior management that training really is as vital as the Training Professional says it is. Why is it that when things get tough, the training budget is one of the first to face the axe, viewed as a nonproductive overhead?"

Perhaps one answer is that we have failed to prove that training is essential for an organisation to meet its business goals or that training provides a good return on the investment in it. Training must be driven by the business needs of the organisation. If the link to business needs can be established this will ensure that the training is focused on the real issues and demonstrates its relevance to the business. It also provides the vital starting point for any evaluation of the training. It is useful to look at the organisation as embedded in its general external environment (political/ economic, etc.) surrounded by its specific external environment, which directly impacts on the achievement of its goals, and embracing its internal environment (employees, Police Federation, etc.). All of these have a stake in the organisation's future.

Boam, R. and Sparrow, P. (1992). Designing and Achieving Competency: A competency approach to developing people and organisations: Maidenhead: McGraw-Hill. P.6.
 Kuraitis V P (1981). 'The Personnel Audit.' Personnel Administrator. Vol 26, Part II. P.29

Torrington and Hall (1987)³⁶ state that training seldom produces quick results with a tangible pay-off. Evaluation is therefore necessary to discover if training is providing the intended benefits. Where training is thoroughly evaluated before and after the training itself, then the direct effects could be demonstrated more clearly. Harrison (1988)³⁷ sees:-

compe

"...evaluation as an essential part of the learning process. Without it there can be no certainty that the learning event has achieved its objectives; or even if has done so, these objectives were themselves worthwhile; or that whatever the success and relevance of the learning event, it was carried out in the most effective way."

Kenney and Reid (1986)³⁸ state that in general terms the evaluation enables the effectiveness of an investment in training to be appraised and provides data which can justify expenditure on training.

Police Training

Ellison (1997)³⁹ stated that Police education and training are commonly identified in academic literature as essential professional characteristics in that they provide the theoretical knowledge and expertise from which the occupation

³⁶ Torrington, D. and Hall, L. (1987), *Personnel Management A New Approach*, New Jersey: Prentice Hall. P..338.

³⁷ Harrison, R (1988), *Training and Development*, London: Institute of Personnel and Management. P.271.

³⁸ Kenny, J. & Reid, M. A, (1986), *Training Interventions*, London: Institute of Personnel Management

³⁹ Ellison, J. (1997) *Professionalism in RUC*. Belfast: University of Ulster.

may be practised. Education is often presented as the 'Sine qua non of professionalism - the indispensable ingredient' Harris (1978)⁴⁰. He goes on to state that there is considerable international variation between police forces in the level of educational attainment required for entry into the occupation and is particularly evident through-out those countries that allow direct entry into the officer grades (especially on the continent). In general, entry does not require high qualifications. Additionally, police training does not in general take place in an academic setting, other than the modicum required to fulfil the requirements of basic and further training.

Since 1985, considerable progress has been made in moving towards a coherent and cumulative programme of police training that is able to respond quickly and flexibly to changing demands. In spite of this progress, several reports have criticised the way that police training is managed. The Police Training Council's Training Strategy⁴¹ was introduced to ensure that all training programmes meet the following criteria: -

(a) all training in the Police Service should be based on an identified need and should have clearly defined objectives in accordance with force/national policy;

⁴⁰ Harris, R. (1978) The Police Academy and the Professional Self-Image. USA: Goodyear. P. 278.

⁴¹ Home Office Circular 39/1993, Future Management of Police Training. London: HMSO.

- (b) training should be set fully in the context of the entire range of needs of the police service and should be flexible enough to cope with the changing demands made on the service;
- (c) all training should contribute to a coherent pattern of career development;
- (d) training courses should be structured, where possible, to allow modular and relatively short periods of training so as to address the requirements of the service while reducing to a minimum, the amount of abstraction from duty;
- (e) training should be delivered using the most appropriate methods;
- (f) a suitable balance should be struck between knowledge-based and skills-related training;
- (g) all training should be evaluated in accordance with the guidelines set out in Home Office Circular 105/91⁴² in order to assess its effectiveness and to ensure that it provides the best possible value for money.

Despite such clear guidance, training historically has not always been viewed as a primary need. Many police managers view it as a cost in time and money, and not as an investment as discussed above. It is therefore imperative that training meets needs and is seen as offering value for money.

⁴² Home Office Circular 105/1991, *The Evaluation of Training in the Police Service*. London: HMSO.

The Police Federation, in their discussion paper, Project Fforward⁴³ stated that: -

'...the majority of the 98% of the police service represented by the Police Federation are dissatisfied with their training and demoralised by its failings. They feel unsupported and inadequately trained to do their job.'

Good practice says police training must be driven by operational needs and evaluated by the extent to which it improves organisational performance.

Operational needs are impacted upon by external environmental factors such as political, economic, social/demographic/cultural, technological and internal environmental factors. Each of these should be considered when Forces are developing their overall business strategy and operational plans. Achieving success in these strategies and plans is dependent on the successful management of human resources. As such, the development of a specific HR strategy and operational plan which includes training and development and the subsequent monitoring of this in terms of its impact on organisational performance appears to exemplify best practice. The extent to which this is carried out and the organisational structures which are designed to support it vary considerably across Forces.

In '<u>The Frontiers of Excellence</u>', Waterman (1994)⁴⁴ has published powerful evidence to demonstrate that "people centred" organisations are the key to long

44 Waterman, R. (1994) The Frontiers of Excellence, London: Nicholas Bealey.

⁴³ Project Fforward Partnership White Paper, The Police Federation, Create Consulting and the IBM Corporation, June 1998.

term organisational health and prosperity. The challenge that training and development must accept is to be a major contributor to such prosperity in this people centred approach. Furthermore the imperative is also to strive to ensure that training budgets are delivering 100 per cent effectiveness. Organisations have always been concerned about the value for money that they get from their training budgets. Pressures for organisational change such as the need for movement towards the leanest of structures and the transformation of organisational culture by becoming a learning organisation, only add to the pressures. In Managing Learning (1999)⁴⁵ HM Inspectorate of Constabulary identified that the cost to the service of all training that takes place is considerable, human resources, equipment, consumables, facilities and installations, albeit difficult to quantify with any degree of accuracy. They stated that this was because there was no common costing model. It went on to state that: -

'The financial pressures now facing the Service have focused attention on the need to scrutinise all costs associated with training and upon the management of training budgets. A6

The Audit Commission (1989)⁴⁷ estimated that training in the police service represents around 8% of the total police budget. They also estimated that approximately 70% of the cost of training relates to lost operational time. It is

⁴⁵ Managing Learning, A Study of Police Training, HM Inspectorate of Constabulary. London: Donnelly-Pindar. April 1999. P.32.

⁴⁶ Ibid. P.32.

⁴⁷ Audit Commission. Police Paper No.4 The Management of Police Training, (1989).

million plus or minus 10% (Training Education and Development, TED)⁴⁸. These costs include pay and allowances, trainers, training related expenses, support personnel, construction, procurement costs and overheads. This accounting is not entirely complete, as there is no costing for support activities or opportunity costs. In examining costs an important problem to overcome is the lack of detailed, well-accepted methods for analysing the resources and costs associated with training functions and activities. Researchers may have aggregate estimates of training costs useful for budgeting and planning purposes, but these do not necessarily permit detailed analysis of the resources to organise training. In the Report of the Independent Commission on Policing for Northern Ireland (1999)⁴⁹ they recommended: -

"...that a total training and development budget should be established, covering all aspects of training..."

and it goes on to recommend that: -

"...there should be service level agreements between police districts / departments and the police Training Branch, setting out what the Branch is expected to deliver to the district or department concerned." 50

The current position within the PSNI is that training is rarely as effective as desired. However, much is known about how to achieve good training and

⁴⁸ Training Education and Development, Primary Reference Document. Unpublished RUC report, January 2001. P.72.

⁴⁹ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999) A New Beginning: Policing in Northern Ireland. HMSO. P.92.
⁵⁰ Ibid. P.93.

development results. Such ideas provide the basis for training and development "best practice". If the PSNI is to meet the challenge of change then these opportunities must be taken in order that quality training can be provided within acceptable costs. This is part of the measurement that this research seeks to achieve.

Best Value

Alexander (2000)⁵¹ states that Best Value will ensure that no service funded wholly or largely from the public purse can fail to adopt and apply its central principles and techniques. It has been an explicit move by central government to replace the unpopular Compulsory Competitive Tendering regime by a new approach which would encourage more cost effective local services, but use mechanisms other than competition and place a much greater emphasis on improving service quality. In the policing context, Brogden (1982)⁵² commented that chief constables "...by decisions over deployment...over training, over resource allocation and within the organisational reward structure...determine the form of police work within local society." There is a clear connection between the objectives of Best Value and the assertion by Benyon and Bourn (1986)⁵³ that the consent of citizens is more likely to be forthcoming if policing

⁵¹ Alexander, A. (2000) The Police and Best Value: Applicability and Adaption, Policing and Society, 2000, Vol. 10, PP.263-275.
⁵² Progdon M. (1992) The Program of the

⁵² Brogden, M. (1982) *The Police Autonomy and Consent.* London: Academic Press. P.30. ⁵³ Benyon, J. and Bourn, C. (1986) *The police: Powers, Procedures and Properties.* UK: Pergamon Press. P.17.

is perceived to be effective, and if the expectations are met.

The TED strategy states that at an organisational level, TED must demonstrate best value in terms of the return on investment of public monies. This is based upon the fact that the PSNI is committed to the ethos of Best Value as a methodology by which the service provided is managed and delivered. Whilst cost is an essential ingredient of the assessment of Best Value, quality is seen as the prime motivator in the process. Best Value will promote a five-year rolling programme, where genuine strategic thinking and financial planning will give logical and justifiable decisions and actions. So the ethos of Best Value is to implement a process of continuous improvement through the review system and so ensure better accountability, efficiency, effectiveness, quality and savings in terms of cost. However, as the reviews are over a five-year rolling period the Best Value challenge is not about individual training interventions, but is more to do with the auditing of the whole Training Branch function.

Balanced Scorecard

The TED Primary Reference Document⁵⁴ states that the development of TED needs analysis may be linked to the Balanced Scorecard approach. This is due to the fact that the Scorecard was used in the development of the TED policy itself.

⁵⁴ The Training Education and Development Primary Reference Document. Op. Cit. P.15.

The concept of a balanced scorecard approach was popularised by Kaplan and Norton (1996a)⁵⁵ and is increasingly being used as a framework for performance measurement and improving performance. They describe the Scorecard as measuring organisational performance: -

"...a Balanced Scorecard is organised around four distinct perspectives – financial, customer, internal, and innovation and learning. The name reflected the balance provided between short and long term objectives between financial and non-financial measures, between lagging and leading indicators, and between external and internal performance perspectives."

They identify that the objectives and the measures must be derived from an organisation's vision and strategy, and that the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgemental, performance drivers of the outcome measures. They see the Scorecard as being used to: -

- " ... accomplish critical management processes:
- Clarify and translate vision and strategy.
- Communicate and link strategic objectives and measures.
- Plan, set targets, align strategic initiatives.
- Enhance strategic feedback and Learning."56

In short Kaplan and Norton see the scorecard as a way of translating strategy into action at the local level as it helps communicate corporate objectives to the people performing the work. It also gives the organisation the ability to link its

⁵⁵ Kaplan, R.S. & Norton, D. P. (1996) The balanced Scorecard, Translating Strategy into Action. USA: Harvard Business School Press. P.viii.
56 Ibid. P.10.

financial budgets with its strategic goals. As Bourne and Bourne (2000)⁵⁷ highlight, the Scorecard can be used to reveal connections between performance in one area and results in another, and factors affecting the business which may not have been considered. Kaplan and Norton (1996b)⁵⁸ see the focus of the Scorecard in terms of learning as enabling organisational and strategic learning at the executive level, making it invaluable for those who wish to create a strategic management system.

Olive et al (1999)⁵⁹ examined the use of the Balanced Scorecard in the public sector where profit is not the objective of the business. He concluded that the logic of the scorecard is the notion that the balance among different perspectives and measures should promote long-term survival and profitability, however, he felt that for public sector organisations the goals are somewhat different, and a substitute needed to be found for the financial emphasis. He went on to state that the focus will be more to do with benefit to society rather than profit, although there is a necessity to remain within a budget. He concludes that the Scorecard approach appears both reasonable and attractive, however:

"It remains to be seen...whether the rational end-means approach of the Balanced Scorecard concept has a place in the public sector."

⁵⁷ Bourne, M. & Bourne, P. (2000) Do you Know the Score? <u>Professional Manager</u>. November 2000, P.43.

⁵⁸ Kaplan, R. S. & Norton, D. P. (1996) Using the Balanced Scorecard as a Strategic Management System. Harvard Business Review. January-February 1996. P.84.

⁵⁹ Olive, Nils-Goran. Roy, Jan. & Wetter, Magnus (1999) Performance Drivers – A Practical Guide to using the Balanced Scorecard. England: Wiley. PP.297-307.

Some writers such as Maisel (1992)⁶⁰ have adjusted the Scorecard perspectives. Maisels has replaced the learning and growth perspective with a human-resources perspective. Here he measures, training, core competencies and corporate culture. However, once again this approach has only been aimed at profit making organisations.

Hopwood (2000)⁶¹ has an even more critical view of the balanced Scorecard approach: -

"They have been cleverly sold as new innovations with immense strategic potential, when in practice they are nothing of the sort. ... (Balanced Scorecard) is a poor substitute for genuine processes of organisational insight, learning and adaptation."

The Balanced Scorecard is not in use within other areas of the PSNI, outside of Training Branch, so it is not clear how this approach can be used to identify the costs and benefits of the training function in the current strategic set-up.

Evaluation

Bumpass (1990)⁶² states as the amount and need for training increases, management asks more frequently, "What am I getting for the money I spend?"

⁶⁰ Maisel, L. S. (1992) Performance Measurement: The Balanced Scorecard Approach, <u>Journal of Cost Management</u>, Summer, 1992.

⁶¹ Hopwood, A. (2000) Costs count in the strategic agenda. Mastering Management. November 2000. P.10.

⁶² Bumpass, S. (1990) Measuring participant performance - An alternative, Australian Journal of Educational Technology, 6(2), PP.99-107.

The answer from the training community has been to increase the evaluation of training but often without answering management's question. Phillips (1997)⁶³ advocates a results-based approach to the Human Resource Development (HRD). He sees it as a philosophy which emphasises results. He states:-

"If the impact of the program cannot be measured, then perhaps the program should not be implemented...The evaluation strategy is usually determined when the program objectives are established."

He claims evaluation of training should be undertaken for several purposes which can fall into one of two categories:-

- 1. to improve the Human Resource Development (HRD) process, or
- 2. to decide whether or not to continue the training.

He summarises:-

"An increasing common reason for evaluation is to determine whether or not the program justified the cost. This aspect of evaluation compares the cost of a program to its usefulness or value. Overall, this evaluation provides management with data to eliminate an unproductive program, to increase support for programs which yield a high payoff, or to make adjustments in a program to increase the benefits." ⁶⁴

There is more pressure today than ever before to produce results with HRD programmes. Training and Development departments are struggling to meet demands from management for outcomes and from participants who want a

64 Ibid, P.36.

⁶³ Phillips, J. J. (1997) Handbook of Training Evaluation and measurement methods (3rd Edition) Kogan Page: London. P.35.

programme that produces results. Marsden (1991)⁶⁵ states that in the current economic environment and in the light of the *Training Guarantee*, training personnel are going to be faced with hard economic decisions about the viability and value of the programmes they offer. They are going to need evidence of the quality of their programmes in order to make such decisions and to influence the decisions of organisational management. This evidence can only come about through evaluation.

Defining Evaluation

The starting point for this section must be to establish what in fact we mean by the evaluation of training. It is one of those words much bandied around and equally much misunderstood. Or rather, perhaps, it is a word that means different things to different people. It is clear that there is no one agreed definition of evaluation. In 1971, the Employment Department said that evaluation: -

"...differs from validation in that it attempts to measure the overall cost-benefit of the course programme and not just the achievement of laid down objectives."

A similar definition of training evaluation was provided by the Manpower

⁶⁵ Marsden, M. J. (1991) Evaluation: Towards a definition and statement of purpose. Australian Journal of Educational Technology, 7(1), 31-38.

Services Commission (1981)⁶⁶:-

'The assessment of the total value of a training system, training course or programme in social as well as financial terms. Evaluation differs from validation in that it attempts to measure the overall cost benefit of the course or programme in social as well as financial terms.'

Clearly with the vast sums of money being invested in the development of human resources, it is expedient that some ongoing audit or evaluation of the training is carried out, to measure its value both to the individual and the organisation. The standard understanding of evaluation is that it is a systematic assessment of worth or merit of some object. In educational terms one recent definition of evaluation is:-

'Evaluation is part of the decision-making process. It involves making judgements about the worth of an activity through systematically and openly collecting and analysing information about it and relating this to explicit objectives, criteria and values' Aspinwall. (1992)⁶⁷

A United Kingdom glossary of training terms defines evaluation as:

"The measure of the total value of a training course or programmes in social as well as financial term. Evaluation differs from validation in that it attempts to measure the overall cost-benefit of the achievement of its laid down objectives" (Wills and Covell 1977). 68

⁶⁶ Manpower Services Commission (1981) Glossary of training terms. (3rd Edition). London:

⁶⁷ Aspinwall, K., Simkins, T.Wilkinson, J. F. & McAuley, J. (1992), Managing Evaluation in Education. London: Routledge P.2.

⁶⁸ Wills G. and Covell D. (1977), Tailor Making Managers, Research Papers in Marketing and Logistics Studies. England: Cranfield School of Management.

Wigley (1988)⁶⁹ defines it as:-

"a data reduction process that involves the collection of large amounts of data which are analysed and synthesised into an overall judgement of worth or merit."

The implication here is that the judgement of worth can be supported by the data. What is not clear in any of the definitions offered is what is entailed in the criteria of worth. It has been suggested that a major problem in arriving at a definition of evaluation is confusion with related terms such as measurement, assessment and validation. The impression is that, for the most part, evaluation is seen as an activity that occurs at the completion of a training programme, and that the practice of evaluation is confined to a limited number of activities.

There is increasing recognition of the importance of evaluation. The government initiative Investors in People puts a heavy emphasis on the need for evaluation and quotes one of the four essential principles underpinning the scheme as:-

Standard number one states that an Investor in People⁷⁰

'evaluates the investment in training and development to assess achievement and improve future effectiveness. Just under a quarter of the indicators used for assessing an organisation for recognition as an Investor in People involve the evaluation of training.'

⁶⁹ Wigley, J. (1988). Evaluating training: Critical issues. Training and Development in Australia, 15(3), PP.21-24.

⁷⁰ Employment Department (1991). *Investors in People -The National Standard, No 1*. Sheffield: Employment Department.

Many authors that describe a comprehensive approach to evaluation generally speak of the principle rather than the practice. Phillips (1997)⁷¹ describes ten myths about the 'mysterious' process of evaluation:-

- 1. I can't measure the results of my training effort.
- 2. I don't know what information to collect.
- 3. If I can't calculate the return on investment (ROI), then it is useless to evaluate the programme.
- 4. Measurement is only effective in the production and financial arenas.
- 5. My Chief Executive does not require evaluation, so why should I do it?
- 6. There are too many variables affecting the behaviour change for me to evaluate the impact of training.
- 7. Evaluation will lead to criticism.
- 8. I don't need to justify my existence, I have a proven track record.
- 9. Measuring progress towards objectives is adequate evaluation strategy.
- 10. Evaluation would probably cost too much.

Purpose of Evaluation

Training evaluation is carried out for a wide range of purposes, which can be categorised generally under four main headings:

⁷¹ Handbook of Training Evaluation and measurement methods. Op. Cit. PP.1-5.

- To improve the quality of the training in terms of the delivery, e.g. trainer, methods, length of training, the training objectives content, level.
- To assess the effectiveness of the overall course, training methods.
- To justify the course prove that the benefits outweigh the costs.
- To justify the role of training for budget purposes, in cutback situations.

Usually the evaluation will have one of these purposes as its primary focus. If there has been a number of general complaints about a training programme, then the evaluation will be directed primarily at identifying the cause and improving the quality. If there are concerns that the training is not achieving what was intended, then the evaluation will start by looking at the effectiveness of the training. If there are concerns about the costs of the course or whether there is a cheaper way of achieving the same results, then it will focus first on justification. If the Organisation has a tough budget-setting process or is looking for cutbacks, then the emphasis may be on providing proof that the outcomes of the training justify the investment in it. The four headings are clearly all inter-linked and to some extent, any evaluation addresses all four purposes.

Hewitt (1989)⁷² sees evaluation as providing data demonstrating the programme's effectiveness on targeted behaviour. Wigley (1988)⁷³ has a broader view of the

73 Evaluating training: Critical issues, Op. Cit. P.21.

⁷² Hewitt, B. (1989). Evaluation a personal perspective. <u>Training and Development in Australia</u>, 16(3), pp23-24.

purpose to improve the programme and facilitate informed decision making. A comprehensive view of the purpose of evaluation is given by Bushnell (1990)⁷⁴ who identifies four purposes:-

"...to determine whether training programs are achieving the right purposes... to detect the types of changes they [the trainers] should make to improve course design, content, and delivery... [to tell the trainer] whether students actually acquire the needed knowledge and skills."; the ultimate purpose being to "balance the cost and results of training."

All of Bushnell's purposes involve end stage evaluation methods, that is, the data that will fulfil them can only be obtained at the completion of the programme. A more useful and practical definition is that provided by Hamblin (1974)⁷⁵:

'Any attempt to obtain information (feedback) on the effects of a training programme, and to assess the value of training in the light of that information.'

Some might argue that this definition is too loose, too unspecific and suggests an undisciplined approach. However, I believe that evaluation is often not attempted because people think that evaluation involves large, sophisticated and expensive studies.

Approaches to Evaluation

I am now going to examine the various approaches to evaluation. By the 1930's, a great deal of experimentation was taking place in educational establishments.

⁷⁴ Bushnell, D. S. (1990). Input, process, output: A model for evaluating training. Training and Development Journal, March, PP.41-43.

It was decided that the greater availability of education to the masses and the greater range of abilities among the students might require different approaches to training. As a result evaluation programmes were set up to compare the traditional approaches with more novel ones. In order to make these comparisons it was decided to use the objectives of the approaches themselves as a means of evaluation. This Goal Based approach to evaluation was developed from the educational work of Tyler on the use of objectives and using such objectives for systematic evaluation. Tyler (1950)⁷⁶ stated: -

"The process of evaluation is essentially the process of determining to what extent the education objectives are actually being realised...however since the educational objectives are essentially changes in human beings, that is, the objectives aimed at are to produce certain desirable changes in the behaviour patterns of the students, then evaluation is the process for determining the degree to which these changes in behaviour are actually taking place."

This approach was an advance over previous methods that were judgements made upon examination results and teachers' impressions of classroom work. Educational establishments understood and accepted the work of Tyler, however, as Bramley (1992)⁷⁷ states it was not until the late 1960's that organisations began to control the quality of training by setting training objectives. It was not until the 1960's and 1970's that training and development interventions in organisations began to catch up with the practice of setting objectives, as had

⁷⁷ Evaluating Trainer Effectiveness, Translating Theory into practice. Op.Cit. P.92.

⁷⁶ Tyler, R. W. (1950) Basic principles of curriculum and instructional design. Chicago: University of Chicago Press.

been the case in public programmes. The most popular and most enduring contribution to the field of evaluation has proven to be the model developed by Kirkpatrick over thirty years ago. He specified the expected outcomes as objectives at a number of levels. His model has withstood the test of time and is useful in developing evaluation procedures, methods and instruments.

Kirkpatrick's (1994)⁷⁸ model has four levels: -

Reaction The reaction level evaluation measures the subjective views of

the participants to the training, such as rating the overall

quality of the training, or were the objectives met?

Knowledge The knowledge level of evaluation measure the extent to

which the participant actually learned the material presented.

Testing is most often used to evaluate the transfer of

knowledge at this level.

Performance Performance level evaluations are designed to measure if the

participant can demonstrate the transfer of training on the job

or in a simulation. Performance appraisals are most often used

to measure this level.

Organisational At the organisational level of evaluation instruments and

methods are designed to determine what economic or

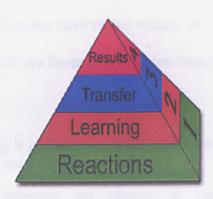
psychological effects have occurred; such as, is the

organisation more productive, have attitudes changed?

⁷⁸ Kirkpatrick, D. L. (1994) Evaluating Training Programs: The four levels. San Francisco, Berrett-Koehler.

The four levels can be illustrated in the following way: -

Figure 3. Kirpatrick's 4 level model.



According to a recently published study by the Industrial Society⁷⁹, in all of the organisations represented in the study:

'End-of-course questionnaires are still the most popular form of evaluation (80%), followed by prior agreement of written objectives for the course agreed in advance with line managers (70%).'

Bramley (1991)⁸⁰ also notes that the evaluation of training remains dominated by the four-level approach of reaction, learning, behaviour and results. However, there has been criticism of this approach, despite its position as the received wisdom of the training profession. It has been argued that the 4 levels approach is flawed as an evaluation model as it is no more than a taxonomy of outcomes (Holton 1996)⁸¹.

⁷⁹ Training Needs Analysis and Evaluation, Training Trends. The Industrial Society. NO 41. August 2000. P.16.

⁸⁰ Evaluating training effectiveness: translating theory into practice. Op. Cit.

⁸¹ Holton, E. F. (1996) *The flawed four-level evaluation model*. <u>Human Resource Development Quarterly</u>, Vol 7 No.1. PP.5-21.

This reflects Alliger and Janak (1989)⁸² who, in a comprehensive study on the 4 levels model, stated that the implied causal linkages between each level of the taxonomy had not been demonstrated by research. A review of the literature shows that reported correlations have varied widely. In response, Kirkpatrick (1994)⁸³ asserted that there are linear relationships between the constructs of his model:-

"...if training is going to be effective, then it is important that trainees react favourably." (p. 27).

"...without learning, no change in behaviour will occur..." (p. 51).

However, Dixon (1990)⁸⁴ found that there is little correlation between reactions and learning.

Recent research from American Society of Training and Development Benchmarking Forum suggests that most organisations conduct some evaluations at Levels One and Two and do not venture further into evaluating at Level Three and Level Four. The survey also found that participating organisations believed there to be diminishing returns from evaluating at Levels Three and Four and, furthermore, that there may even be spurious results or dubious results from measurement at these levels. The results are shown in Table 1.

⁸² Allinger, G. M. & Janak, E.A. (1989) Kirkpatrick's levels of training criteria: Thirty years later. Personnel Psychology. Vol.42, PP.331-340.

⁸³ Evaluating training programs: The four levels. Op. Cit.

⁸⁴ Dixon, N. M. (1990) The relationship between trainee responses on participation reaction forms and post test scores. <u>Human Resource Development Quarterly</u> Vol.7 No.1, pp129-137.

Table 1. Implementation of Kirkpatrick's 4 Level Model

Evaluation Type	% of Survey Participants		
Level 1 – Reaction	88.9		
Level 2 – Learning	27.9		
Level 3 – Behaviour	13.2		
Level 4 – Results	4.3		

Source: ASTD (1997)⁸⁵

Although tests provide a measure of knowledge gains, the data collected does not indicate whether new knowledge is successfully used on the job to enhance job performance. Performance and organisational levels of evaluations are not conducted frequently due to the difficulty and cost involved in collecting reliable and valid data. Again in the same study by the American Society of Training and Development, of all the organisations represented in the study, only about 10% evaluated training at the behaviour/performance level and only about 25% at the organisational level.

A number of models have been proposed since the 1960's, perhaps the most developed is the work of Warr, Bird and Rackham (1970)⁸⁶ which was

American Society of Training and Development <u>Training and Development</u>. Autumn 1997.
 Warr P., Bird M. and Rackham N.(1970), *Evaluation of Management Training*, England: Gower.

supplemented by Hamblin (1974)⁸⁷ and later modified by Easterby-Smith (1986)⁸⁸. The context, input, reaction and outcomes classification (CIRO) is similar to Easterby-Smith's Context, Administration, Inputs, Process and Outcomes (CAIPO) classification where some of the labels are used in somewhat different ways. Easterby-Smith (1994)⁸⁹ outlines four general purposes for evaluation: Proving, Improving, Learning and Controlling, along with a fifth function of Fulfilling a ritual purpose (see Figure 4). The first of these, Proving seeks to demonstrate that something actually happened, and this can be linked to some judgement of the relative costs and benefits. The second aim, Improving seeks to ensure that future training interventions are better than at present. The third aim. Learning, recognises that evaluation is itself an intervention and that, by its very nature, it must impact in some way on the learning process. The final aim, Controlling, is very common and is essentially concerned with ensuring that trainers or training establishments perform up to expected standards. The central Ritual element recognises that people expect to be given a 'happy sheet' at the end of a course and have an opportunity to have their say.

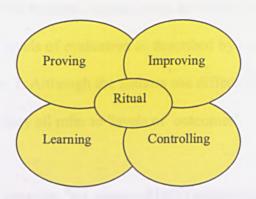
~-

⁸⁷ Evaluation and Control of Training, Op. Cit.

⁸⁸ Easterby-Smith, M. (1986), Evaluation of Management Education, Training and Development. England: Gower

Easterby-Smith, M. (1994), Evaluating Management Development, Training and Education. England: Gower. P.23.

Figure 4. Easterby-Smith Evaluation Model.



Hamblin (1974)⁹⁰ talks of training effects and the changes that have taken place as a result of training. He views a cause and effect chain linking the five levels of training effects. He divides the fourth level into two, distinguishing between effects on indicators such as crime rates and the economic effects i.e., a cost benefit analysis.

This can be set out as follows:

TRAINING

leads to REACTIONS

which leads to LEARNING

which leads to CHANGES IN JOB BEHAVIOUR

which leads to CHANGES IN THE ORGANISATION

which leads to CHANGES IN THE ACHIEVEMENT OF ULTIMATE

GOALS

Hamblin does not claim that his framework should replace the framework

⁹⁰ Evaluation and Control of Training. Op. Cit. P.14

devised by Warr, Bird and Rackham (1970)⁹¹, but rather it supplements these classifications. Whilst essentially correct, Hamblin (1974) is more concerned with training effects and neglects evaluation in the design stage and context level. A summary of levels of evaluation as described by some influential authors are presented in Table 2. Although the authors use different terminology, the similarity lies in that they all refer to 'levels of outcomes'.

Brinkerhoff (1988)⁹² provides "six stages of HRD program development and operation":

- To determine that an identified problem represents a training need and to determine what the real goals are.
- 2. To determine the most appropriate training strategy.
- 3. To determine if the chosen strategy is successfully implemented.
- 4. To determine if learning occurred and to what extent.
- 5. To determine usage outcomes (at individual level).
- 6. To determine impacts and worth (at organisational level).

⁹¹ Evaluation of Management Training. Op. Cit.

⁹² Brinkerhoff, R. O. (1988). An integrated evaluation model for HRD. <u>Training and Development Journal</u>, February 1988, P.P.66-68.

Table 2. Summary of Levels of Evaluation. Bramley (1986)⁹³

AREAS	COMPONENTS	KIRKPATRICK (1959)	WARR, BIRD & RACKHAM (1970)	HAMBLIN (1974)
Within the Training	Judgements of the quality of trainees experiences Feedback to trainees	Reactions	Reactions	Reactions
	about learning Measures of gain or change Feedback to trainers	Learning	Immediate	Learning
	About methods Relevance of the			
	learning goals Measures of use of learning or change of	Behaviour	Intermediate	Job Behaviour
	behaviour Retrospective back to trainers			
Organis	Measures of change	Results	Ultimate	Organisation
—ational Effective	in organisational performance	·	5	
ness.	Implementation of individual / action plans or projects	na dia kaominina dia kaomi Ny INSEE dia kaominina dia	and the second of the second o	
Social or	Measures of social			Ultimate
cultural	cost and benefits			
values	Human resources			Ultimate
	accounting			

⁹³ Bramley, P. (1986), Evaluation of Training, A Practical Guide. London: Gwynne Printers Ltd. P.10.

Implicit in these six stages are seven corresponding purposes. These seven purposes require the utilisation of evaluation methods to obtain data continuously from the beginning of the instructional process - needs analysis - to the completion of the process - performance assessment. In comparing the six-stage Brinkerhoff model to the widely used Kirkpatrick model, it is clear that the latter falls short of an ideal model because it is entirely outcome-orientated whereas the six stage model is integrated to include instructional activities in the planning, design and implementation stages of the instructional process.

Hamblin, Kirkpatrick, Warr, Bird and Rackham and Brinkerhoff all talk in terms of results, ultimate outcomes and impacts which all go beyond the trainee's job behaviour and focus on changes in organisational effectiveness. As we have seen, any definition of evaluation in the context of training and development should include a number of elements: what it is, what it involves and what it leads to. Evaluation is an analytical process and involves the collection of subjective and objective data from a number of sources using a variety of techniques about a training programme and the reduction of such data.

Evaluation should lead to the synthesis of the data into a report containing a summary of results and recommendations, with validated rationales, for consideration by the decision-makers.

Delivering Evaluation

Ideally, evaluation exercises should be objective, systematic and comprehensive, though because of the nature of the difficulties involved which contaminate the effects of much training, such objectivity and precision is not always possible. A methodological framework can however be discussed which is of value to the evaluator. Lewis and Thornhill (1994)⁹⁴ state there is little doubt that evaluation of training is problematic; it will not be conducted more effectively merely by researchers practising the techniques that the training literature prescribes; what is needed is an organisation-wide approach that embraces the culture of the organisation and makes evaluation a part of the organisation's life blood.

Effective training must have value for the organisation. The process of attempting to assess the total value of training: that is, the costs, benefits and general outcomes which benefit the organisation as well as the value of the improved performance of those who have undertaken training. As stated earlier, familiar British and American models of training evaluation recognise that the ultimate objective of training is its benefit to the performance of the organisation. Many see an implicit assumption that positive effects at one level should have a beneficial effect at higher levels; for example, effects at levels 2 and 3 should have beneficial effects at levels 4 and 5. However, can we make this assumption when evaluation, where it takes place at all, occurs only at the lowest level or lowest two levels of this hierarchy? The questioning of this assumption is to

⁹⁴ Lewis, P. and Thornhill, A. (1994). *The Evaluation of Training: An Organisational Culture* Approach. <u>Journal of European Industrial Training</u>, Vol.18 No.8, 1994, PP.25 -32

doubt how reliance on training evaluation at its lowest levels can be used to demonstrate a clear and reliable linkage between training effectiveness and the fulfilment of strategic organisational objectives.

To reinforce this doubt, I consider Brinkerhoff's (1988)⁹⁵ approach to training evaluation which criticises models of evaluation which only centre on the outcomes from training (e.g. reactions to training, trainees, earning, changes in job behaviour, etc.), especially at only the lowest outcome levels (e.g. reactions). This view is supported in the sense that it is indeed necessary to look for a broader linkage between training and the organisation generally than what might just be a reactive one, whereby the only expressed linkage between the advent of training and its effects is through immediate reactions to a particular training event.

In Brinkerhoff's approach, he advances an integrated evaluation model which involves evaluation before the delivery of training as well as in respect of its outcomes. This demonstrates a more strategic approach in the sense that the evaluation commences at the initial stage of identifying and prioritising training needs, in relation to organisational objectives. He also emphasises benefits to the organisation from undertaking training, which he categorises as "impacts and worth" in relation to overall organisational objectives. This integrated approach is advocated because it should minimise the risk of not meeting the objectives of

⁹⁵ Op. Cit. PP.66-68.

undertaking training at the input stages (e.g., in relation to needs analysis, programme design and programme implementation) as well as evaluating reactions and impact at the outcome stages.

The human resource management (HRM) movement, which gained ground in the 1980's, emphasises that a strategic approach to evaluation should be adopted. This involves ensuring that all HRM activities complement one another and that these activities are consistent with the overall objectives of the organisation. From this strategic perspective, therefore, explicit recognition of the linkage to impact level (effects of training on the whole organisation) should assume greater importance. If the training is not making a direct and discernible contribution to organisational objectives, then it is questionable if it should be undertaken. Evaluators within an organisation must promote organisation-level training evaluation linked to a change in organisational culture and which should also encourage a more integrated approach linked to organisational objectives. It is perfectly valid to assert that senior management attitudes need to be supportive of evaluation and most organisational change programmes cite this as a crucial precursor to change activities. However, evaluation is something that permeates through all parts of the organisation; it is something that should involve everyone.

Therefore, in order to spread a cultural norm of organisation-level training evaluation, an organisational culture must be developed. Explicit recognition of

organisational objectives linked to an integrated approach to training evaluation will certainly improve the effectiveness of evaluation and therefore the contribution of training. Edwards (1991)⁹⁶ speaking of the changes within Further Education in the United Kingdom stated: -

"In the new climate public services must offer 'value for money' and 'freedom of choice' to potential customers.

Efficiency alone is not enough to measure the value of education... there is a need for measures of effectiveness...and a quality of service."

With regard to evaluating training to determine the cost / benefit ratio Phillips (1991)⁹⁷ states: -

'This reason alone makes the development of HRD program costs an important issue.' He further states 'The cost of providing HRD in an organisation is increasing. And, as organisations scramble to fund their budgets, it is imperative that they know where their money is spent and for what purpose.'

Identifying the costs and benefits of training and development is still a rarity in to-day's cost-conscious age, but I agree with the view expressed by Easterby-Smith 1986⁹⁸ who believes it is the ultimate assessment: -

"Nevertheless, it is still argued by influential authorities such as Michael Scriven (1967), that evaluations should always attempt to examine the value of any particular programme. According to Hesseling (1966)⁹⁹, evaluation research aims at providing a systematic and comprehensive measure of success or failure for training programmes."

⁹⁶ Edwards, Judith. (1991) Evaluation in Adult & Further Education. Liverpool: The workers' Education Association. P.3

⁹⁷ Phillips, Jack J. (1991) Handbook of Training Evaluation and measurement methods (2nd Edition) Kogan Page: London. P.128.

Evaluation of Management Education, Training and Development. Op. Cit. P.29
 Hesseling, P. (1966), Strategy of Evaluation Research in the Field of Supervisory and Management Training, Van Gorcum: Anssen.

Police Evaluation

In a Police context HM Inspectorate of Constabulary in the report on Managing Learning (1999)¹⁰⁰ defines Evaluation as: -

'The process of assessing the total value of a learning event. Evaluation measures the overall cost-benefit of a learning event and determines whether learning objectives have been met.'

And Validation as: -

'A series of assessments to determine whether a training programme has achieved its desired objectives.'

As the Home Office Circular 114/83¹⁰¹ makes clear, a period of rapid expansion in police resources is drawing to a close. The emphasis is changing to value for money, and so the efficient and effective use of resources by managers makes many demands for appropriate skills and abilities to do the job.

In April 1990, the Police Training Council's Steering Group ¹⁰² on the Overview of Police Training Arrangements set up a working group to examine the issues involved in the evaluation of training. This circular offers guidance on ways in which police training should be evaluated.

¹⁰⁰ Managing Learning, A Study of Police Training, HM Inspectorate of Constabulary, London: Donnelly-Pindar, April 1999, PP.152-155

¹⁰¹ Home Office Circular 114/1983. Manpower, Effectiveness and Efficiency in the Police Service. London: HMSO.

¹⁰²Home Office Circular 105/1991. *The Evaluation of Training in the Police Service*. London: HMSO.

The guidelines set out the levels at which evaluation should take place:

- The effectiveness of particular courses/events in achieving specified
 objectives;
- The relevance of specified objectives to the needs of the individual/force/ police service;
- The inter-relationship between individual elements of the training programme, the force, and the police service training strategy;
- The appropriateness of training as the most effective way of meeting identified needs; and
- The soundness of the training programmes in terms of quality of service and equal opportunities policies.

In Managing Learning (1999)¹⁰³ HM Inspectorate of Constabulary found it impossible to gauge precisely how much training was being evaluated within the police service, however the report commented that trained evaluators only spent 44% of their time evaluating training. In addition, it stated that twenty-six forces had an evaluation strategy in place, whilst seventeen did not. Of those forces which were carrying out evaluation of training, only two had comprehensive and effective evaluation strategies.

¹⁰³ Op. Cit. P.111.

The report acknowledged that not all training could be evaluated, however it outlined a series of questions which should be asked when a prioritisation process is being carried out¹⁰⁴: -

Importance

How important is the training to the organisation?

Are there legal or service delivery ramifications?

Frequency

How often is the training undertaken?

Is the training delivered to large numbers of staff?

Cost

How costly is the training undertaken?

What was the cost of developing the training in terms of resources and finances?

It concludes that if evaluation is to be effective, it must lead to some change in the training product. The accumulation of data is only the first step in this process. The PSNI Strategic Priorities includes: -

"To audit current training provision particularly in relation to Organisational Goals and the Policing Plan."
Training Branch Strategic Plan 1998-2001 Area A2.

¹⁰⁴ Op. Cit. P.112.

"To evaluate the effectiveness of training.

To establish Evaluative and Quality Control mechanisms
to encompass all training activities undertaken by the Branch".

Training Branch Strategic Plan 1998-2001 Area E1 & 2.

As the result of the findings of the Police Training Councils Working Group on the costing and financing of police training, a new costing system was introduced to all forces in England and Wales by the Home Office Circular (1986)¹⁰⁵. The new arrangements were introduced in April 1990 and were intended "to ensure that forces can establish the true costs of training their personnel and that all costs can be accounted for." The information was intended to help individual forces to formulate their force training plans, to compare year on year changes in the costs of different types of training and enable a comparison of the cost of providing training in-force with the cost of sending personnel on training courses provided elsewhere. Such an approach had the additional benefit of providing valuable management information for forces. The system was proposed to be in the control of the Forces Training Department rather than the Force Finance Department.

The RUC / PSNI TED Primary Reference Document (2001)¹⁰⁶ states that training will be evaluated in terms of its cost-effectiveness and its contribution

¹⁰⁵ Home Office Circular. (29th December 1986) Costing and Financing of Police Training. London, HMSO,

¹⁰⁶ Training Education and Development, Primary Reference Document. Unpublished RUC report. January 2001. P.20.

towards enabling the organisation to achieve its goals. Specialist expertise will be established to evaluate TED in terms of outcomes achieved against outputs sought. The work of these specialists will be integrated with other specialisms in TED needs analysis, design and delivery.

Analysing the Costs and Benefit Ratio of Training

It is a rare organisation where cost of training is of no concern! In terms of evaluation one of the most pressing problems facing the police service and researchers is the inability to demonstrate the cost effectiveness or utility of proposed training programmes. For most organisations, the human resource officer is at a disadvantage in budget discussions. He or she must argue abstractly. This inability to frame training programmes in a cost-benefit jargon casts the training department in the role of a luxury rather than a necessity. But imagine a department meeting in which the personnel officer announces that the overall efficiency of the force could be increased by 4.8 percent if a training system were introduced which costs less than £25,000. A statement such as this can provide the necessary information for making sound cost-benefit decisions regarding potential training programmes. We must try and make the transformation from abstract relationships to concrete benefits. It is my intention to develop a model which will help in this translation.

One of the more confusing aspects of incorporating cost analysis into evaluation and decision making is that a number of different, but related, concepts and terms are often used interchangeably in referring to such approaches. Levin (1985)¹⁰⁷ identifies four such terms. He calls these cost-effectiveness, cost-benefit, cost utility and cost-feasibility. He contends that although each is related to and can be considered to be a member in good standing of the cost-analysis family, each is characterised by important differences. These terms can be summarised as follows: -

Cost-Effectiveness Analysis

Levin considers Cost-effectiveness (CE) analysis to refer to the evaluation of alternatives according to both their costs and their effects with regard to producing some outcome or set of outcomes. Typically, training evaluation and decision making must focus on the choice of a training intervention or alternative for meeting a particular objective, such as increasing test scores in basic skills. In these cases the results of alternative interventions can be assessed according to their effects on improving test scores. When costs are combined with measures of effectiveness, all alternatives can be evaluated according to their costs and their contribution to meeting the same effectiveness criterion. Under cost-effectiveness analysis, both the costs and effects of alternatives are taken into account in evaluating programmes with similar goals. It is assumed that (1) only

¹⁰⁷ Levin, H. M. (1985) Cost-effectiveness. A Primer. New perspectives in evaluation Volume 4. London: Sage Publications.

programmes with similar or identical goals can be compared and (2) a common measure of effectiveness can be used to assess them.

The effectiveness data can be combined with costs in order to provide a costeffectiveness evaluation that will enable the selection of those approaches which
provide the maximum effectiveness per level of cost or which require the least
cost per level of effectiveness. Kearsely (1982)¹⁰⁸ develops this by stating that
under normal circumstances, it is vital to get the most results for the least costs.
There are three terms that describe how well you are balancing your costs and
results: efficiency, effectiveness and productivity.

Improved efficiency means that we have achieved the same results with fewer costs.

Improved effectiveness means that we have achieved better results with the same costs.

Improved productivity means that we have achieved better results with fewer costs.

As you can see, improved productivity means improving both efficiency and effectiveness at the same time, or put simply:

Improved Productivity = Doing More with Less.

¹⁰⁸ Kearsley, Greg. (1982) Costs, benefits and productivity in training systems. London: Addison-Wesley Publishing P.6.

Cost-Benefit Analysis

Cost-benefit (CB) analysis refers to the evaluation of alternatives according to a comparison of both their costs and benefits when each is measured in monetary terms. A CB study attempts to measure the values of both the costs and benefits of each alternative in terms of its monetary units. Since each alternative is assessed in terms of its monetary costs and the monetary values of its benefits, each alternative can be examined on its own merits to see if it is worthwhile. In order to be considered for selection, any alternative must show benefits in excess of costs. The best selection would be the particular one that had the lowest CB ratio or the highest ratio of benefits to costs. Because CB analysis assesses all alternatives in terms of the monetary values of costs and benefits, one can ascertain (1) if any particular alternative has benefits exceeding its costs; and (2) which of a set of educational alternatives with different objectives has the lowest CB ratio (i.e., the lowest ratio of costs to benefits). CB is intended to measure the impact of training on the organisation in terms of money saved or additional money earned. The manager/owner must make decisions on how often a particular cost category occurs (e.g., fixed costs vs. variable costs). As well, some costs should be determined on an organisational basis, while others should be determined on an individual basis. Another issue is to determine the period of time over which the organisation benefits from the training (e.g., during the training, a year later, three years). This can only be determined by the owner/manager of the organisation. Some organisations may want to count the

salary paid to their employee while they are on training. Depending upon the nature of the organisation, cost and benefit categories may be modified to meet a particular need.

Kearsley (1982)¹⁰⁹ describes Cost/benefits analysis as a methodology or set of procedures that allows you to:

- Justify existing training programmes.
- Achieve a better understanding (hence, control) over a training system.
- Determine how to reduce training expenditures and, hence, increase efficiency.
- Determine how to improve training results through increased effectiveness.
- Evaluate the feasibility or pay-offs of a proposed training programme.

In its simplest terms, managing training and education programmes can be reduced to a kind of balancing act between *costs* and *results*. The costs are those incurred in planning, developing, conducting and evaluating instructional programmes. The results are those outcomes that you expect to produce as a direct or indirect consequence of the instruction. These outcomes typically include improved job performance or better employee attitudes, satisfaction or morale.

¹⁰⁹ Ibid. P.12.

So, Kearsely (1982)¹¹⁰ gives the following definition of cost/benefits analysis: -

"A technique or method for assessing the relationship between results or outcomes and the costs required to produce them."

Mishan (1988)¹¹¹ sets out his view of cost benefit analysis as to whether a number of projects A, B, C, etc. should be undertaken and if funds are limited, which one among these specific projects should be selected. He states that another question that cost benefit analysis can sometimes address is determining the level of outputs which a programme can produce.

He asserts that: -

"...the analysis of cost-effectiveness can be described as a truncated form of cost-benefit analysis; it draws inspiration and guidance only from the cost side - or alternatively, only from the benefit side of a cost benefit format." 112

Mishan states that the distinction is essentially between a cost-effective approach in which the funds available are under political control and cost-benefit analysis where the valuation of the benefit in question takes its place in the calculation as an essential datum in an overall economic appraisal irrespective of whether the person is to pay for the good or not. Economic evaluation of the benefit side therefore provides the information necessary for political decision-makers to make more judicious allocations of funds for political purposes.

¹¹⁰ Ibid. P.6.

Mishan, E. J. (1988) Cost Benefit Analysis (4th Edition) London: Unwin Hyman. P.110
 Ibid. P.110

Cost-utility (CU) analysis refers to the evaluation of alternatives according to a comparison of their costs and the estimated utility or value of their outcomes. When subjective assessments must be made about the nature and probability of educational outcomes as well as their relative values, cost-utility (CU) analysis may be an appropriate tool. Both cost-benefit and cost-effectiveness approaches require specific types of quantitative data to construct their evaluations. In contrast, cost-utility analysis permits the use of a wide range of types of qualitative and quantitative data to inform the decision. The advantages of the CU approach are that the data requirements are less stringent, a large number of potential outcomes can be included in the evaluation, and imperfect information and uncertainty can be addressed systematically. The major disadvantage is the fact that the results cannot be reproduced on the basis of a standard methodology among different evaluators, since most of the assessments are highly subjective ones

Value Added Analysis measures the monetary value of a job, as well as improvements in performance that can be attributed to training. The cost of training is deducted from its total value to arrive at the value added. This method is not as reliable as others, as it requires subjective estimates, but it is useful in ranking the relative impact of different courses that the organisation is considering offering and prioritising on the basis of value added.

CB, CE and CU analyses all share a number of properties. They all enable a choice among alternative strategies by obtaining some measure of both costs and results for each potential strategy, so that one can choose the approach that has the lowest cost for any particular result or the best result for any particular cost. However, there is one situation in which estimates of costs alone are important. Cost-feasibility (CF) analysis refers to the method of estimating only the costs of an alternative in order to ascertain whether or not it can be considered. That is, if the cost of any alternative exceeds the budget and other resources that are available, there is no point in doing any further analysis. Cost-feasibility represents a limited form of analysis that can determine only whether or not alternatives are within the boundaries of consideration. It cannot be used to determine which ones should actually be selected, Levin (1985). 113

Phillips' Results-Based HRD Model

This is really an extension of Kirkpatrick's 4 levels model (as discussed earlier in this chapter) into a top fifth level – Return On Investment (ROI). Furthermore, Phillips actually demonstrates how to place monetary values on training worth and calculate the return on investment of a training intervention. Phillips' approach is to collect post programme data, isolate the effect of training from

¹¹³ Cost-effectiveness. A Primer. New perspectives in evaluation. Op. Cit. PP.17-30

other influences and thereby attempt to estimate the contribution that the training intervention has made in financial terms.

This model takes into account the total human resource development process, from needs analysis to communicating programme results. It is based on an 18-step process, with 11 steps involving some form of evaluation. While the model may seem too complex for small and medium-sized organisations, it can be modified to meet specific needs. Table 3 provides a brief summary of each step (Phillips (1997)¹¹⁴): -

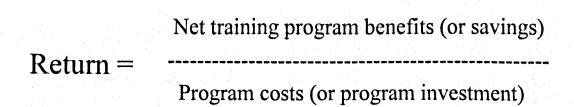
Table 3. Phillips Results-Based HRD Model

- 1. Perform Needs Analysis and Develop Objectives —uncovers any inadequacy in performance, typically conducted by interviews or questionnaires. Needs analysis should also provide objectives for the training program.
- 2. Identify Purposes of Evaluation –identifies the reasons for evaluation (e.g., measure the contribution of the program to employee, employer)
- 3. Establish Baseline Data -helps determine what should be evaluated, for example, the number of errors on the production line in the past year.
- 4. Select Evaluation Method/Design -helps design methods based on program objectives.
- 5. Determine Evaluation Strategy –answers questions regarding who conducts the evaluation, where is it conducted, and when.
- 6. Finalise Program Objectives this is introduced once questions on evaluation method have been answered.
- 7. Estimate Program Costs/Benefits –organisational decision-making tool to determine the cost and benefit of undertaking the program.
- 8. Prepare and Present Proposal –formal proposal to management for consideration of training program.
- Design Evaluation Instruments –involves the design (or selection) of instruments.
 Examples include questionnaires, exams, attitude surveys.

Phillips, J. J. (1997) Handbook of Training Evaluation and measurement methods (3rd Edition) Kogan Page: London. PP. 51-63.

- 10. Determine and Develop Program Content -determines what participants need to know.
- 11. Design or Select Training Methods -involves issues regarding instructional approach.
- 12. Test Program and Make Revisions –provides developers with an opportunity to make adjustments to the evaluation methods.
- 13. Implement or Conduct Program -can involve both classroom and on-the-job training.
- 14. Collect Data at Proper Stages -a system for collecting data must be part of an evaluation plan.
- 15. Analyse and Interpret the Data –used for a number of reasons: e.g., training program adjustments or overall evaluation report.
- 16. Make Program Adjustments -if the training program did not produce desired results, then adjustments should be made at this stage.
- 17. Calculate Return on Investment (ROI) -determines the economic (or organisational) justification of the training program. Results should be compared to a pre-determined benchmark.
- 18. Communicate Program Results -to HR staff to improve program, management for decision-making purposes, and to participants to see how they performed.

Kearsley (1982)¹¹⁵ introduces the concept of Return on Investment (ROI). The phrase stems from the accounting field and normally refers to the ratio of earnings to investment. In the training field, it is used as a measure of the performance of an activity within an organisation. ROI is the ratio of what something returns to what it costs.



Thus, if a sales training programme cost £100,000 but increased sales by £1 mil-

¹¹⁵ Costs, benefits and productivity in training systems. Op. Cit. P.8

-lion, its ROI would be £1,000,000 / £100,000 = 10 times. Similarly, if a safety training programme costs £25,000 and it resulted in £100,000 less in accident payments, its ROI would be £100,000 / £25,000 = 4. Phillips states that any ROI greater than 1 is worth looking at.

Payback Period (Phillips (1997)¹¹⁶).

A measurement of the years and months required to pay back the original investment in training. If the revenue/savings generated from a training programme are constant each year, the payback period is determined by dividing the total original cash investment by the amount of the expected annual revenue/savings.

Phillips model has two major weaknesses. The first is its lack of attention to the pre-programme phase where the pre-testing must take place if his model is to be tested. The second weakness is its reliance on the estimator's ability to identify a unit of output which can be converted into monetary worth. The strengths of the model include the way it attempts to isolate the effects of the programme from other influences. Phillips ROI model is positivist in its approach and has gained popularity among managers.

¹¹⁶ Op. Cit. P.261.

Economic Analysis

In a review of some possible methods for evaluating the returns from resources spent on training, Swanson (1998)¹¹⁷ argues that since economics provides much of the core theory on which HRD is founded, it is important that HRD managers use the latest relevant economic theories to ensure that sufficient credibility is given to their evaluations. In the studies he reviews, it is not unusual for the benefits that are calculated to amount to many times the resources applied. However, many of these relate to the evaluation of public expenditure programmes. His approach is clearly results based but it is necessary to enquire to what extent this approach can provide the information which the decision-makers in organisations require.

Black and Lynch (1996)¹¹⁸ undertook an elaborate econometric analysis of the relationship between training and company performance. The data they used identified different types of training and also used variables to allow for differences in the characteristics of the person obtaining the training. They found that the impact of training on productivity is related to the time between the

--

¹¹⁷ Swanson, R. (1998) Demonstrating the Financial Benefit of Human Resource Development: Status and Update on the Theory and Practice. Human Resources Development Quarterly, Vol. 9 (3) PP.285-295.

Economic Review, Vol. 86 No. 2 pp263-267.

training and the measurement of its impact: -

"...current training lowers productivity, while past training raises current productivity. This is very similar to what we see happening with the age of the capital stock in manufacturing."

They found that it took time for the benefits of training to have an impact on company results. Their finding is very illuminating since it points clearly to the importance of a firm organisational context for training which will feed through to results in due course. The firm and its managers need time to integrate newly acquired skills into existing processes and organisational structures.

However, mainstream economics fails to answer three questions: -

- Does training increase the resources available to the firm?
- Does this result in an increase in the inputs used by the firm?
- Are there counteracting factors brought into play when training is undertaken - diseconomies of scale, restructuring costs or output price changes?

A different approach such as the framework developed by Penrose (1980)¹¹⁹ offers a way, as yet poorly developed, for economics to get around these problems. At its centre is the need to distinguish between the resources available to a firm and the inputs actually used by the firm. Penrose argues that inputs, as normally identified, are not the actual resources used by firms. Instead, firms use

¹¹⁹ Penrose, E. T. (1980) The Theory of the Growth of the Firm (2nd Ed). Oxford: Basil Blackwell.

the services that such inputs can provide. The competency of the management is assessed by its ability to derive services from a given level of inputs. However, for ease of measurement, generic measurement standards tend to be applied directly to inputs. As a result of this clarification, there is no reason why there should be a simple relationship between changes in the quantity or value of inputs and changes in output. Furthermore, it is possible to derive an argument for the rational presence of unused inputs in a firm. These insights mean that it is now straightforward to use changes in learning and capabilities to explain changes in productivity. Penrose (1980)¹²⁰ states: -

"The possibilities of using services change with changes in knowledge. More services become available, previously unused services become employed and employed services become unused as knowledge increases about the physical characteristics of resources, about ways of using them, or about products it would be profitable to use them for. Consequently, there is a close connection between the type of knowledge possessed by the personnel of the firm and the services obtainable from its material resources."

The focus in economics remains on prices: the prices of inputs determine production technology decisions in firms; the size of firms - relative to market size - determines output quantities and the factors that influence market prices. It is assumed that the firm is operating at the most efficient size and with the most efficient technology i.e., it is using all its resources in the proportions that result in the greatest output. At the same time, the range of factors that determine the nature of activity and decisions within the firm are largely ignored. The

¹²⁰ Ibid. P.76.

possibility of deriving a useful methodology to identify training needs, the optimal organisation and integration of new skills and to isolate the impact of resources applied to training is limited within this framework.

The KPMT Model

In a useful addition to the debate Kearns and Miller (1996)¹²¹ have developed the KPMT model (derived from the initials of the authors names). They assert that every benefit can be converted into a hard financial metric. The model starts with baseline business measures that the organisation is trying to improve. The role of the training professional is to identify the factors that have an impact on these. If these factors can be improved, the next step is to identify the measures and the interventions that can deliver the improvement. As Kearns (1996)¹²² states:-

> "...the first questions in training should always be how much improvement are we expecting the training to achieve and how can we measure that?"

The KPMT model is then utilised in a nine-stage process. These sequential stages are identified in Table 4 (Kearns and Miller 1996)¹²³. These form a set of critical questions, which the authors believe, that if followed, will help training managers

(Publishing) Ltd.

122 Kearns P. (1996) Evaluation- from the bottom-line backwards? Croner Training and Development Briefing. September 1996

Op. Cit. P.65

¹²¹ Kearns, P. & Miller, T (1996) Measuring the Impact of Training and Development on the bottom line, An Evaluation Toolkit to make Training Pay. England: Technical Communications

and leaders in organisations ensure maximum return on their investments on training interventions.

Table 4. The KPMT 9-Step Model

Step 1	What business output measures are you trying to improve?
Step 2	Who has an impact on those outputs, how and by how much?
Step 3	Can their impact be improved through HRD interventions?
Step 4	What bottom-line 'tell-tales' can be used to measure small improvements?
Step 5	What learning or training / development objectives can deliver the required improvements?
Step 6	How are participants reacting to the HRD input?
Step 7	Are they learning what they are meant to learn?
Step 8	Are they using the learning at work?
Step 9	Has the intervention had the desired effect on the business output measures?

Kearns and Miller (1996)¹²⁴ identify two types of training: -

1. Basic training, which has to be undertaken and needs to be validated and is achieved as cost effectively as possible. It cannot fall below a given standard if the company is to remain operationally effective.

¹²⁴Op. Cit. P.14

2. Training with added value, i.e., it could influence profits or quality - if an organisation does not depend on this there is a question if it is worth doing at all.

If basic training is absolutely crucial and mandatory, then it is taken as read that we must train in that subject, so no actual measurement of value is necessary, however, it must be delivered effectively and at the best cost possible. The training which delivers added value will bring extra benefits to an organisation. Evaluation in this area is therefore vital, as we must ask how much benefit will be achieved against corresponding costs. The benefit envisaged should be considered before the training is embarked upon. The authors believe that training that started as adding value will become the basic skills of the future, especially as customer expectations change.

Kearns and Miller state that the early stages of the Training Needs analysis is critical and it involves moving from clearly identified business needs to business focused training. They also highlight that training may not be the answer to all strategic goals. The value which can be obtained from training includes individual competencies, organisational competencies, and job competencies. Homing in on such critical competencies is the key to adding value. Finally they state 125: -

"...what measurable effect do we want competencies to have?"

¹²⁵ Op. Cit. P.33.

We therefore need to ask managers what business improvement they want from training and development.

Kearns and Miller (1996)¹²⁶ see two issues: -

- Making enough effort at the initial analysis stage, to get the bottom line
 measurement to start from is usually worth it in the long run because it will
 ensure that valueless training stops and high value training starts off on the
 right foot.
- 2. The reason line managers often think it is not worth their time is because they do not attach any real value to training and development. They pay lip service to it and will use it for every reason except bottom-line objectives.

They therefore argue that training must be seen as an investment with a return, not just pure cost or it will consistently be under pressure to reduce that cost.

They contend that training needs can be linked to a balance scorecard only on a broad business analysis. This can then be refined into broad targets in an attempt to identify exactly what problems exist. At this stage it is necessary to examine what training and development solutions can be designed to link back to the business goals.

¹²⁶ Op. Cit. P.53.

Kearns (2000)¹²⁷ develops this into a baseline added value evaluation (AVE) model, with emphasis on the baseline level which examines how much value will the training add in £'s, and on the level 4 evaluation as to what value the training added in £'s.

The weaknesses in the models are similar to those in Phillips' (1997)¹²⁸ ROI model. There seems to be a belief in the evaluator's ability to identify and measure what is going on inside in the organisation. This model also lacks Phillips' attention to the contextual factors in the situation. Its strengths include the fact that it pays greater attention to the analysis of training needs than does the models of Phillips or Kirkpatrick and its development of a useful training process from analysis to evaluation is also an addition.

¹²⁷ Kearns, P. (2000) Maximising Your ROI in Training, Delivering measurable added value through employee development. London: Prentice Hall.P.85.

¹²⁸ Phillips, J. J. (1997) Handbook of Training Evaluation and measurement methods (3rd Edition) London: Kogan Page.

The London Business School Approach

Michelli and Haskins (1997)¹²⁹ articulates the London Business School (LBS) approach with the following declaration: -

"Evaluation should be used to amplify the learning experience. This is achieved through the early integration of evaluation processes. In this way when evaluation takes place, it is seen as a natural consequence of the development experience."

This approach uses learning logs, rolling session evaluation, reflective journals, action plans, mentoring and stakeholder reviews. Analysis of the needs, delivery of the programme and evaluation co-exist as mutually reinforcing factors.

Evaluation is most effective when considered at the same time as design and when it reflects the learning methodologies used in the programme. Thus, for most management development programmes, the evaluation process should be open and flexible reflecting the "experimentation and concrete experience" approach of the programme itself. Evaluation, with this approach typically uses the above techniques, but also includes reflective interviewing post programme and includes the client and trainer along with the manager and the participant in the programme evaluation. One strength of the LBS approach is that it is in keeping with the modern phenomenological movement. A weakness is that it

¹²⁹ Michelli, D. & Haskins, G. (1997) Measuring Learning and Transferring it from Programme to Practice, . Conference Proceedings, Assessment Measurement, Evaluation Conference; Linkage Inc.

could be accused of adding nothing new but merely stating what has been accepted as good practice for many years.

Return on Training Investments -Non-financial Approach

Hequet (1996)¹³⁰ states that some organisations are placing importance on the non-financial returns of training. That is, measuring the non-financial return of training in helping improve the performance of the organisation.

Owners/managers are considering factors like improved employee morale, increased customer satisfaction and higher employee retention (intellectual capital). Many experts in the field of training believe that non-financial measures provide a more balanced understanding of an organisation. For example, consider an employee's loyalty to the organisation: -

"To get a fix on the value of training, you first have to measure loyalty.... training has little value if newly skilled employees jump ship. Combining measures of employee retention and investment in training can provide a real value of training." (Hequet, 1996)¹³¹

Another key non-financial measure is gauging customer satisfaction. Training can ensure that customers are satisfied, generating greater sales and eventually, stronger revenues. However, because this factor is difficult to quantify, it relies

¹³⁰ Hequet, Marc. Return on Training Investments -Non-financial Approach. Training Magazine, March 1996, P.41.

¹³¹ Ibid. P.45.

on the judgement of the owner/manager to determine training impact in a qualitative manner.

ROI as a fallacy

Tobin (1998)¹³² states that the notion of return on investment calculations is a fallacy. He bases his reasoning on the fact that any major change effort within an organisation requires not just training, but many other factors. He contends that these other factors cannot be factored out so the notion that we can isolate the effects of training is an erroneous belief. However, Tobin does go on to promote the view that the focus should be placed upon the achievement of the organisation's goals and that return on investment is only useful in evaluating the overall effort.

He describes Tobin's Law as: -

"If you start and end all your learning efforts by focusing on your organisation's goals, you will never be asked to do a ROI analysis to justify your budget" 133

Tobin appears to imply that if the learning is linked to organisational goals there is little need to evaluate, however, this seems to place insufficient emphasis on ensuring that the learning has been achieved at a reasonable price.

¹³² Tobin, Daniel R. (1998) The Fallacy of ROI Calculations. @ www.toinscls.com
133 Ibid.

Developing Costs and Benefits

Kearsley (1982)¹³⁴ utilises the idea of creating a model for cost benefit research. He describes a model as a way of representing relationships between concepts. A model will help to explain these relationships to others and will allow things to come out the same each time you compare them. When a model is constructed, it necessitates making assumptions. In fact, saying that a relationship exists between costs and results, is in itself an assumption. The way to change that assumption into a fact is to collect some data that support the relationship. Once a question or problem is formulated, the next step is to try to identify what the relevant cost and outcome variables are and how they relate to each other.

He further states that there is no way to do a cost benefits analysis without data. The data required may be numerical information (e.g., How many students per year? What is an instructor's annual salary?), or it may deal with locations (Where?), times (When?) or people (Who?). Frequently there will be a need for information on the reasons (Why?) things are done or the way (How?) they are done. The data needed can be collected in a number of different ways from a number of different sources:

 Questionnaires. Often the information you need can be obtained by asking people to respond to a questionnaire.

¹³⁴ Costs, benefits and productivity in training systems. Op. Cit. P.6

- Interviews. Talking to somebody (either in person or via phone) is another common way to get information.
- Observation. Sometimes the only way to get the information needed is to see what people do in a certain task or situation.
- Financial documents/reports. Cost information can often be obtained from documents such as annual reports, budgets, five-year plans, etc.
- Literature. Systematic search of periodicals or books may turn up information needed in a study. Kearsley (1982). 135

Kearsley argues that although there is a need for data after you have formulated the problem, it is quite likely that you will need some data in order to actually formulate the problem. In fact, he sees data collection as a continual and ongoing activity during such analysis. Having collected the data, it is possible to determine what things cost, compare alternatives and address the question or problem that provoked the study.

Analysis of costs and benefits within the Police Context

Historically, within the Police Service much has been stated about the value of training but little research has been done to identify if training is value for money.

¹³⁵ Ibid. P.7

In recent research on police forces in the United Kingdom it was found that: -

'Of the Forces surveyed none appeared to be carrying out a full cost/benefit analysis,...' Francis-Smythe, (1998)¹³⁶.

In Managing Learning (1999)¹³⁷ HM Inspectorate of Constabulary stated that the police service should capitalise upon the available skills and achieve a more effective return on the considerable investment that has been made. The report concluded that the service makes a considerable investment in training without measuring the return on investment. In my initial development of the outline for this research and in my application for a Bramshill Fellowship, there was a requirement to carry out a rigorous review of all the related research studies on the costs and benefits of training within the police service both within the United Kingdom and throughout the world. I discovered that a great deal of literature existed on evaluation and the need for analysis of costs and benefits, but no model existed to carry out such a requirement.

The sheer scale of the cost of training as identified earlier in this chapter means that, at the very least from a public accountability viewpoint, there is a need for demonstrating that we are achieving value for money and that the investment supports and contributes to the organisational strategy and goals. There has traditionally been a working assumption that it has not been possible to predict or

¹³⁷ Managing Learning. Op. Cit. P.116.

¹³⁶ Francis-Smythe, J. (1998) Maximising Effectiveness and Minimising Abstractions (MEMA) in Police Training, University College Worcester. P.24

evaluate the costs and benefits of training and development to the same degree of accuracy as say, a capital investment project. Yet the business cases for such capital projects often have as many unknowns and estimates. Often the following reasons are given for not tackling Kirkpatrick's fourth level evaluation, when it is appropriate to do so:

- There are no clear/obvious/direct performance measures, e.g., leadership training, time management, etc.
- Many factors other than training can intervene and affect results.
- Performance measures relate to whole units, e.g., departments or even the organisation as an entity. If the training is not directed at all the staff in the unit, then it is very difficult to identify the effects of the training for the individual or group of staff that has been trained.

These reasons do make ultimate level evaluation difficult and not a precise art, but they should not prevent cost and benefit analysis being undertaken.

The Training Education and Development Primary Reference Document (2001)¹³⁹ states that training must be delivered in a way that demonstrates best value in terms of the return on investment of public monies.

¹³⁸ Kirkpatrick, D. L. (1994) Evaluating Training Programs: The four levels. San Francisco, Berrett-Koehler.

¹³⁹ Training Education and Development, Primary Reference Document. Unpublished RUC report. January 2001. PP.14-20.

To establish that the return on investment represents best value for money there will be evaluation at the micro-level to evaluate

- a) processes for TED needs analysis;
- b) processes for TED design;
- c) processes for TED delivery;
- d) specific courses for links between individual performance and TED provision using indicators which enable comparison of outcomes achieved and outcomes sought: and
- e) relative merits of similar courses.

To ensure the maintenance of the link between business goals and TED provision there will be evaluation at the macro-level which will focus on

- a) environmental scanning for future TED needs; and
- b) developing links between organisational performance and TED provision using indicators which enable comparison of outcomes achieved with outcomes sought.

However, the TED document does not explain how the process of evaluation will be undertaken. It is expected that the Project Team who are now engaged within the PSNI will develop the necessary systems to achieve this strategy.

As the PSNI moves towards reduced budgets and a shift in the strategic costmanagement of the organisation, there is a need for management within the force to identify that cost is a function of strategic choices. Managers must develop the skills as to how to execute those strategic choices. To carry out this effectively, they must be basing their decisions on information. Although this information is often based upon subjectivity and approximations, there is a need for this information to be available to them in order for management to make such decisions. This is the reason I believe that this research is so vital to the PSNI.

Review

This chapter has surveyed the key literature relating to training, evaluation and the costs and benefits of training. It has linked each of these to the policing environment. It has shown how training is an active management function which contributes to the development of an organisation. Evaluation is an integral part of the training cycle as is the needs analysis. Evaluation can serve a number of different purposes and it is necessary to identify the model that best meets the needs of the organisation. And finally, organisations including the PSNI spend money on training to improve skills and the business of that organisation. There is a need to identify the costs and benefits associated with that spending.

The purpose of this chapter has been to examine the existing systems and processes related to the costs and benefits of training within the literature. These themes provide a classification of ideas that will be carried forward through the remainder of this thesis. The information from this chapter along with the data gathered and analysed from the research proposed in Chapter Three and Four and reported in Chapter Five will help to inform the development of a logical model for identifying the costs and benefits of training within the PSNI in Chapter Six and Chapter Seven.

CHAPTER THREE

METHODOLOGY

This dissertation seeks to investigate the costs and benefits of training within the PSNI. The previous chapter introduced the research context through a review of the available literature. This chapter provides the background for developing suitable methodology for my research. I begin with an introduction to the concept of research, and develop the practical issues which were considered when developing this project. I then examine the issues concerned with research design, before looking at the qualities needed for good research, and finally examining the selection of methodologies for investigating the costs and benefits of training within the PSNI.

Introduction to research

What is research? Many authors of research books do not include a definition of the expression as many see the term as self-evident. Treece and Treece (1982)¹⁴⁰ offer the following definition: -

"Research in its broadest sense is an attempt to gain solutions to problems. More precisely, it is the collection of data in a rigorously controlled situation

¹⁴⁰ Treece E. W. & Treece J.W. (1982) Elements of Research in Nursing. St Louis, USA: The C.V. Mosby Company. P.VI.

Of course this definition is not unreservedly acceptable, however, Macleod Clark and Hockey (1989)¹⁴¹ provide a more practical definition of research as: -

"...an attempt to increase the sum of what is known, usually referred to as 'a body of knowledge', by the discovery of new facts or relationships through the process of systematic scientific enquiry, the research process."

Perhaps in the simplest terms research can be seen as asking a question, collecting information, and answering the question. In the case of this research it will be conducted through examination of existing systems and processes. The question to be answered is ultimately how to develop a model to identify the costs and benefits of training within the PSNI. Research is a means to an end - it has a job to do, especially where resources are scarce, so the decision to invest in research must be justified. As a researcher, it is vital to have a clear understanding of the function (or functions) that a project is serving.

This will help to ensure that the research does the job that it is intended to do, as Herbert (1991)¹⁴² states:

"The main criteria of a research design can be summed up in two questions: Does the design generate answers to the research question? Does it adequately test the hypothesis of the study?"

¹⁴¹ Macleod Clark, J. and Hockey, L. (1989) Further Research for Nursing, London: Scrutari Press. P.15.

¹⁴² Herbert, M (1990) Planning Your Research Project, London: Cassell. P.48.

Before I commenced this study it was necessary to examine the issues relevant to the research methodology. Research is a complex undertaking, involving a series of distinct stages. To plan research properly (both conceptually and logistically), there is a need to be aware of what is involved at each stage, and to see the stages as intimately inter-linked.

Hibberd (1990)¹⁴³ considers that the stages can be divided into two phases. The first is the conceptual phase, where you get the underlying thinking sorted out and do not collect any data. The second is the practical phase, where you commit resources to the collection and analysis of data, leading ultimately to the answering of the research question.

In the conceptual phase the following issues must be addressed:

1. Problem definition - Clearly establishing the question (or questions) that is to be answered by doing the research. The researcher must know exactly why the research is being done and what is to be discovered. An essential aspect of this is to carry out a review of relevant literature to find out what other people have done or said. In the current study this has been covered in the literature review in Chapter Two.

¹⁴³ Hibberd, Malcolm (1990), Research and Evaluation, A Manual for Police Officers, London: The Police Foundation. PP.33-42.

- 2. Specifying the variables The problem defined will in some way be concerned with a number of ideas or concepts. These concepts will become the variables in the research. They should be carefully defined, so that it is clear what you are concerned with. Again these were fully discussed in Chapter Two.
- 3. Developing a design If the variables are to do their job, they must fit into an overall strategy or plan of action. This is the research design. It involves the timing and identification of suitable measurement, population groups and sampling. The rationale and logic of the research design needs to be carefully worked out. Different designs do different jobs, it is vital to ensure that the design used will enable the research question(s) to be answered. This will be further expanded upon later in this chapter.

Practical Stage: -

1. Operational measures -This involves specifying what the variables will look like in practice, and how you are going to measure them. This means developing the data collection instruments such as questionnaires, interviews, etc. The mechanics of measurement must be related to the conceptual definition of the variables at 2 above.

- Data collection This is the fieldwork. Whatever the method of data
 collection, the data must measure what needs to be measured and the method
 of collection must be properly planned and piloted.
- 3. Data analysis Once collected the data must be processed and analysed. The data must be analysed, using appropriate techniques, which must have been considered in advance. Chapter Four discusses the approach considered most appropriate for this study.
- 4. Answering the question This is the time to examine and analyse the results in the light of the research questions defined at the start, and work out what conclusions have been reached. At this point it will be necessary to critically examine the methodology, and be honest about any limitations and weaknesses in the research findings. It is important to be aware that good research does not always give final, definitive answers, but often points the way to the next questions that need to be addressed. Chapter Five sets out the results obtained from the research; Chapter Six discusses a system for developing the analysis into a model of good practice; and Chapter Seven delivers my subsequent analysis and conclusions.

Developing a Research Design

As stated earlier, before commencing any research, it is always best to identify a hypothesis or to make a precise statement of the objectives of the research. This ensures that full thought has been given to what is and what is not required to be investigated and how the investigation should be conducted: -

"The important point is not so much whether there is a hypothesis, but whether you have carefully thought about what is and what is not worth investigating and how the investigation will be conducted." (Bell 1995). 144

It is necessary to clarify what is being requested, and through consultation, translate the problem into a researchable topic. Only at this stage is it possible to consider the appropriate methodology. The initial question is not which methodology to use, but what do I need to know and why? Then it is possible to progress onto what is the best method to collect the information and ask what do I do with it? In the case of this research the aims are:-

- 1. To examine existing systems and processes into the costs and benefits of training.
- 2. To carry out research using various methodological approaches the needs of the organisation in respect of the costs and benefits of training.
- 3. To develop a logical model for identifying the costs and benefits of training within the PSNI.

¹⁴⁴ Bell, Judith. (1995), Doing your Research Project: A Guide for first-time Researchers in Education and Social Science (2nd Ed.). Buckingham: Open University Press. P.19.

Of course there are other considerations to make before deciding on the methodology. Cohen and Manion (1994)¹⁴⁵ explain that in choosing a research methodology, it is important to consider the context in which the project is being conducted, including assessing such factors as accessibility, time and costs.

Another consideration is the assumptions guiding the study, as it is rarely possible to take full account of all variables. How the assumptions were identified was discussed in Chapter One. The assumptions were: -

- There are links between Force Strategy and the Human Resources Function, but the links are not as strong as management would wish.
- 2. The current staff appraisal and development review system is ineffective in identifying training needs and in its general linkage to the training process.
- 3. Business cases, training Needs Analysis and evaluation are important to the organisation and need to be carried out if training is to be a success.
- 4. There is currently no process to test if training benefits the PSNI in a costeffective way.
- 5. Only 'ball park' figures are currently available for the costs of training, although the mechanisms exist to fully cost the units involved in police training in Northern Ireland.
- 6. Some training takes place because of the social benefits accrued or the social cost of not training (e.g., disaster training for an aircraft crash).

¹⁴⁵ Cohen, L. and Manion, L. (1994) Research Methods in Education, 4 Edn, London: Croom Helm. PP.70-72

- 7. Currently evaluations are started after Training has commenced, and they check if the outcomes have met the objectives set for training.
- 8. Evaluations are currently undertaken to Kirkpatrick level 3¹⁴⁶, this involves testing reactions, learning and behavioural change through transference of learning to the workplace.

The assumptions will be taken into consideration in the design of the research methodology. The research process also benefits from pre-understanding, i.e., insights into the problem and the environment before the research process begins. The insights gained during the enquiry provide this understanding.

There are often difficulties for researchers in gaining institutional knowledge and knowledge of the social interaction process. Fortunately, I have a first-hand knowledge of the police organisation which will benefit this research.

McQueen and Knussen (2002)¹⁴⁷ state that in most cases, the research area or question will point to a particular type of study. Hibberd (1990)¹⁴⁸ discusses the main approaches available for the research design as descriptive and experimental. The descriptive research model asks is there a correlation between variables, but unlike the experimental research model, it is not seen as a scientific formula. In experimental research the researcher sets out to test the hypothesis,

¹⁴⁶ Kirkpatrick, Donald, L (1994) Evaluating Training programs: The four levels. CA: Berrett-Koehler

¹⁴⁷ McQueen, R. and Knussen, C. (2002) Research Methods for Social Science. An Introduction. Essex: Pearson Education Ltd. P.17.

¹⁴⁸ Hibberd, M (1990), Research and Evaluation, A Manual for Police Officers. London: The Police Foundation. P.100.

and the researcher does not simply observe what happens but introduces controls within the research. An offshoot of experimental design is quasi-experimental design, this is the application of experimental principles in real-life settings where there is less than full control over extraneous variables. My research was to investigate the needs of the PSNI in respect of costs and benefits of training in the real world and not as a scientific experiment, so a mainly descriptive method was the most appropriate approach for the research I was undertaking.

Originality

In the context of this study it is not intended that the contribution to knowledge will involve a paradigm shift in respect of analysis of the costs and benefits of training. However, it will demonstrate a unique, deep and meaningful grasp of research in the field of evaluation and training in the context of police training. For this it is necessary to act in the role of an action researcher, which Gummesson (2000)¹⁴⁹ defines as: -

"On the basis of their paradigms and preunderstanding and given access to empirical, realworld data through their role... they develop an understanding of the specific decision, implementation, and change process in the cases which they are involved. They generate a specific theory which is then tested and modified through action."

¹⁴⁹ Gummesson E. (2000) Qualitative Methods in Management Research (2nd Ed). Thousand Oaks: Sage. P.208

Data Gathering and Choosing the methodology

Knowing what you want to find out leads inexorably to the question of how to get that information. The choice of methodology must therefore reflect the overall research strategy. If the research is not focused, it will only lead to the gathering of unnecessary data. Moore $(2000)^{150}$ states that methods are the tools of the researcher's trade, and you need to know how to use them, and just as importantly, when to use them. Silverman $(2000)^{151}$ says: -

"It is vital to define the research problem analytically; limit the data to that which is important; demonstrate that the system of data analysis which you intend to use goes beyond a mere list; limit the claims you make about your study; and, think about the relevance of your research for other scholars and for society."

Research methods can be grouped into two broad categories: those that are concerned with collecting data and those that are used to convert data into information. It is important for researchers to recognise the distinction between the use of quantitative and qualitative methods for collecting data. In order to provide the knowledge to choose the correct methods for this study, I will examine these in detail.

151 Silverman D. (2000) Doing Qualitative Research, A Practical Handbook. London: Sage. P.57

¹⁵⁰ Moore, Nick. (2000) How to do Research. The complete guide to designing and managing research projects. London: Library Association Publishing. PP.102-3.

Quantitative Research

Bowling (1997)¹⁵² claims that quantitative research originated from logical positivism of the 19th Century and has become synonymous with the scientific method of enquiry. To this end it can be seen as a general set of orderly, disciplined procedures used to acquire information. It is a formal, objective systematic process using numerical data to obtain information about the world, and thereby can be used to describe or examine relationships and determine cause and effect. Table 5 shows methods of quantitative research as put forward by Bryman (1988)¹⁵³. Bryman¹⁵⁴ goes on to note: -

"Quantitative research is...a genre which uses a special language which appears to exhibit some similarity to the ways in which scientists talk about how they investigate the natural order - variables, control, measurement, experiment."

Of course it can therefore be argued that quantitative research ignores the differences between the natural and social world by failing to understand the 'meanings' that are brought to social life. Most quantitative researchers would argue that they do not aim to produce a science of laws but aim simply to produce a set of cumulative generalisations based on the critical sifting of data.

¹⁵² Bowling, A. (1997) Research Methods in Health. Buckingham: Open University Press. PP 9-

 ¹⁵³ Bryman, A. (1988) Quantity and quality in Social Research, London: Unwin Hyman. P.11
 154 Ibid P.12.

Table 5. Methods of quantitative research

Method	Features	Advantages
Social Survey	Random samples	Representative
	Measured	Tests hypotheses
	variables	
Experiment	Experimental	Precise measurement
	stimulus	
	'Control group'	
	not exposed to	
	stimulus	
Official statistics	Analysis of	Largest data-sets
	previously	
	collected data	
'Structured' observation	Observations	Reliability of observations
	recorded on pre-	
	determined	
	'schedule'	
Content analysis	Pre-determined	Reliability of measures
	categories used to	a ante de trada en la esperanta de la companya de La companya de la co
	count content of	
	mass media	grafia di Balayeke di Kababasa di Kaba Kababasa di Kababasa di Ka
	products	化对对氯化 化自动电路 医皮肤 解除症状

Disadvantages of Quantitative Methodology

Qualitative researchers often assume that a dependence on purely quantitative methodology will neglect the social and cultural construction of the variables which quantitative research seeks to compare. In fact many authorities would argue that failure to acknowledge the theoretical basis on which it is meaningful to make measurements of the entities collected from survey questions will negate the usefulness of the findings. In reality, much quantitative research leads to the use of a set of procedures to define, count and analyse variables. It is further argued that quantitative methods can be used as a quick fix, involving little contact with the sample. Even if data is available and properly collected, the statistical correlation may be based upon variables that, in the context of normal interaction, are arbitrarily defined. The conjecture about the meaning of correlation very often involves the very common-sense process of reasoning which the 'scientific' approach seeks to avoid.

The quantitative researcher can, in the pursuit of measurable phenomena, allow unperceived values to creep in to the process by taking into consideration highly unreliable concepts e.g., personal motivation. Glaser and Strauss (1967), 155 although accepting the importance of hypothesis, state that a purely statistical judgement can unduly influence the development of the hypothesis.

¹⁵⁵ Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative research. Chicago: Aldine.

In reality, most researchers who are using quantitative methods will try and deal with the common problems and understand that a balanced approach will overcome the limitations of a purely quantitative logic.

Qualitative Research

Defining qualitative research can be difficult given the diverse collection of methodological techniques encompassed by the term and the various traditions, disciplines and philosophies involved. Porter (1996)¹⁵⁶ states: -

"Qualitative research is not primarily concerned with the identification and explanation of facts but with people's interpretation of those facts."

It is therefore exploring and understanding people's experiences, feelings and beliefs; and therefore how they interpret and structure their lives.

It may be argued that the only way of establishing the validity of findings from qualitative studies is to apply quantitative processes. Similarly, it may be argued that social science research can only be valid if based upon experimental facts, statistics and the sampling methods used in quantitative research These contentions are rebutted by qualitative researchers such as Silverman (2000)¹⁵⁷ who notes that experiments, official statistics and survey data may be inappropriate for field research. He claims that unlike quantitative approaches,

¹⁵⁶ Porter, S. (1996), Qualitative Research. Journal of Advanced Nursing. 16: PP. 728-735.

the qualitative study can provide a deeper understanding of the phenomena at work.

Hammersley (1992) ¹⁵⁸ sees qualitative researchers as sharing a set of preferences which can be summarised as follows:-

- ⇒ A preference for qualitative data (the analysis of words and images rather than numbers).
- ⇒ A preference for naturally occurring data (observational rather than experimental, unstructured rather than structured interviews).
- ⇒ A preference for meaning rather than behaviour (seeing the world from the point of view of the people studied).
- ⇒ A rejection of natural science as a model.
- ⇒ A preference for inductive, hypothesis-generating research rather than hypothesis testing.

Hammersley (1992) himself sees this as an oversimplification, however, it does show the main features of qualitative approach. In this it also raises the main issues of criticism of qualitative processes.

¹⁵⁸ Hammersley, M. (1992) What's wrong with Ethnography? Methodological Explorations, London: Routledge. PP 160-172.

Disadvantages of Qualitative Methodology

Many authors treat qualitative methodology as a relatively minor process, suggesting that it should be contemplated at a relatively early or 'exploratory' stage of the study. By taking this approach, qualitative methodology would only be used to familiarise oneself with the background setting before the serious work of sampling and counting begins. Many such as Singleton (1988)¹⁵⁹ see qualitative or field research as a form of exploration and description that is useful if a researcher knows relatively little about the subject under investigation. This may of course reflect the fact that qualitative research is stronger on descriptive narratives than on statistical actions. The problem that then faces the researcher is how to classify the events or activities under examination.

This raises the issue of reliability i.e., the degree of consistency with which cases are assigned the same category by different researchers or by the same researcher on different occasions. The issue of consistency is particularly emphasised when qualitative research reports provide little more than a brief extract.

¹⁵⁹ Singleton, R., Straits, B., Straits, M. and McAllister, R. (1988) Approaches to Social Research, Oxford: Oxford University Press. P.11.

As Bryman (1988)¹⁶⁰ comments: -

"...field notes or extended transcripts are rarely available; these would be very helpful in order to allow the reader to formulate his or her own hunches about the perspective of the people who have been studied..."

The reliability of activities can be weakened by failure of the researcher to record apparently trivial, but often crucial, pauses or emphasis. However, it may be that a qualitative researcher openly sets out to provide an unavoidably subjective account of events, but one based upon research training and in an appropriate context. It could be argued that a concern for reliability of observations only arises within the quantitative research tradition and that social reality is always in a state of flux so it is not important to worry about the research instruments measuring reliably. However, such a stance would imply there are no stable properties in the social world and no systematic approach is possible. In modern qualitative research we cannot afford to escape from the issue of reliability.

A further criticism of qualitative research is the question of how appropriate are the explanations it offers. The interpretations or conclusions given are sometimes seen as anecdotal and therefore not giving a clear insight into the phenomenon explored. This complaint of anecdotolism raises the question of the applicability of the study, as the researcher may not have made any attempt to deal with conflicting cases.

¹⁶⁰ Bryman, A. (1988) Quantity and quality in Social Research, London: Unwin Hyman. P.77

Quantitative Verses Qualitative

Seale (1999)¹⁶¹ states: -

"The simplest way in which qualitative social research can be defined is in terms of a negative: it is research that does not use numbers."

However, I feel that the numbers have a place within qualitative research, assisting in the attempts to learn lessons in one place that have relevance for actions and understanding in another place. Of course, contrary to how it is often presented, quantitative research cannot be seen as the opposite of qualitative research. McQueen and Knussen (2002)¹⁶² state that Qualitative and Quantitative research:-

'...can be regarded as merely different ends of the same dimension, an informational continuum that runs from the numerical and purely quantitative to the highly descriptive and linguistic, with various levels in between.'

We can use a creative mix of the two forms of data generation and the generation and testing of theory.

¹⁶¹ Seale, C. (1999) The Quality of Qualitative Research, Introducing qualitative methods. London: Sage. P.119.

¹⁶² McQueen, R. and Knussen, C. (2002) Research Methods for Social Science. An Introduction. Essex: Pearson Education Ltd. P. 27.

The fact that some quantitative measures are a feature of some good qualitative methods shows that the whole quantitative / qualitative dichotomy is open to challenge. Ultimately, objectivity should be the common aim of research enquiry and as Hammersley (1992)¹⁶³ argues: -

"...the process of inquiry in science is the same whatever method is used, and the retreat into paradigms effectively stultifies debate and hampers progress."

He goes on to describe that the choice between quantitative and qualitative processes is not so much the choice between words and numbers or between precise and imprecise data, but the range from less to more precise data: -

"...our decisions about what level of precision is appropriate in relation to any particular claim should depend on the nature of what we are trying to describe, on the likely accuracy of our descriptions, on our purposes, and on the resources available to us; not on ideological commitment to one methodological paradigm or another." 164

The distinction between the two is not straightforward and such oversimplification can obscure the complexity and usefulness of both approaches. Recently, Alan Bryman (1988)¹⁶⁵ questioned the premise of the wide chasm between the two traditional approaches. He concludes that: -

> "The suggestion that quantitative research is associated with the testing of theories, whilst qualitative research is associated with the generation of theories, can...be viewed as a convention that has little to do with either the practices of many researches within the two traditions or the potential of the methods of data collection themselves."

¹⁶³ What's wrong with Ethnography? Methodological Explorations. Op. Cit. P.182

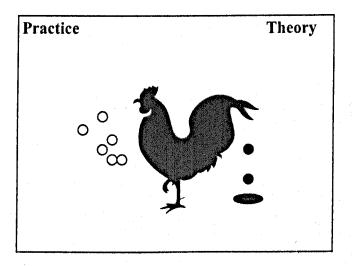
¹⁶⁴ Op. Cit. P. 163

¹⁶⁵ Quality and Quantity in Social Research. Op. Cit. P.72.

Gummesson (2000)¹⁶⁶ argues that: -

"They should be used where they are appropriate. If they are not suitable, it is hardly scientific to provide one-sided support for one or another method."

Gummesson uses the analogy of a chicken to show the researcher who pecks at practice and therefore contributes to theory.



He sees the need to access reality and this may be limited by opportunities to find real-world data. Silverman (2000)¹⁶⁷ argues that when comparing quantitative with qualitative methods, the most we should be looking for are differences of emphasis between 'schools' which contain internal differences.

Bryman (1988)¹⁶⁸ cites several studies that combine a qualitative social survey approach with a qualitative in-depth case study of particular cases. The

¹⁶⁶ Qualitative Methods in Management Research (2nd Ed). Op. Cit. P.3.

¹⁶⁷ Doing Qualitative Research, A Practical Handbook, Op. Cit. P.5.
168 Quality and Quantity in Social Research. Op. Cit. PP 127-129

distribution of variables revealed by the survey is then used to indicate the degree to which cases chosen for qualitative study are typical. Bryman (1988) describes research by Smith and Robbins (1982)¹⁶⁹ who surveyed over 1100 schools and school districts to establish the degree to which parents were involved in the running of schools. Using the results of this, a number of schools were selected to represent different degrees of involvement, which were then studied in depth. The survey can therefore establish the typicality of cases and the representativeness of elements studies within cases.

This brings us back to the issues raised at the beginning of this chapter under an introduction to research. To evaluate the use of any type of methodology we can use the criteria set out by Silverman (2000)¹⁷⁰ -

- * Are the methods of research appropriate to the nature of the question being asked?
- * Is the connection to an existing body of knowledge or theory clear?
- * Are there clear accounts of the criteria used for the selection of cases for study, and of the data collection and analysis?
- * Does the sensitivity of the methods match the needs of the research question?
- * Was the data collection and record-keeping systematic?
- * Is reference made to accepted procedures for analysis?

¹⁷⁰ Doing Qualitative Research, A Practical Handbook. Op. Cit. P.12

¹⁶⁹ Smith A.G. and Robbins A. E. (1982) Structured Ethnography: the study of parental involvement. American Behavioural Scientist. 26(1). PP. 45-61

- * How systematic is the analysis?
- * Is there adequate discussion of how themes, concepts and categories were derived from the data?
- * Is there adequate discussion of the evidence for and against the researcher's arguments?
- * Is a clear distinction made between the data and their interpretation?

From this I realised that the methodology of research should be systematic, professionally conducted and respect the individual.

Validity

Herbert (1990)¹⁷¹ states the validity of the method in its simplest terms refers to whether a test measures what it purports to measure. If this statement can be answered in the affirmative, then there is a level of validity. Many variables can influence validity. These include bias in: recording procedures such as inaccuracy in recording data; in responses to questionnaires; in interpretation by the researcher in observational methods; and even the effect of being measured in an activity.

Hammersley (1990)¹⁷² states: -

¹⁷¹ Herbert, M. (1990) Planning Your Research Project, London: Cassell. P. 52.

Hammersley, M. (1990) Reading ethnographic research, A critical guide, London: Longmans. P. 57.

"By Validity, I mean truth: interpreted as the extent to which an account accurately represents the social phenomena to which it refers."

Validity can become an issue if, as a researcher you take no steps to deal with contrary cases. Comparative methods allow the qualitative researcher to attempt to find another case through which to test out a provisional hypothesis.

Comprehensive data treatment is an integrated, precise model that extensively describes specific phenomena, instead of a simple correlation statement about antecedent and subsequent conditions. This by its very nature implies actively seeking out and addressing deviant cases. During analytical comparison the provisional scheme is confronted by negative or incongruous cases until the researcher has derived a set of recursive rules that incorporate all the data in the analysis.

Reliability

The second main consideration when choosing a methodology is that of reliability. Reliability refers to the stability, dependability and predictability of the tests/methods being employed, in other words, their precision or accuracy.

"Reliability refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions." Hammersley (1992)¹⁷³

¹⁷³ What's wrong with Ethnography? Methodological Explorations. Op. Cit. P. 67.

If a measure is reliable the same results will be achieved regardless of who is conducting the measuring. The more subjective the method, the lower the reliability. It is important for any researcher to bear in mind that a method can be reliable without being valid. Both the reliability and validity of the methods chosen have therefore, to be considered in tandem.

The sensitivity of a measurement should reflect the distinctions and gradations of reality as far as possible. Simple agreement or disagreement with an issue is insensitive because it fails to take account of the strength of agreement or disagreement. There is a trade-off between sensitivity and reliability. Sensitivity requires that distinctions be made, but distinctions tend to be unreliable.

Qualitative researchers often try to claim reliability purely by using pre-tested measures and scales, however, they can often provide highly unreliable counts. This may not be because the research questions are ambiguous, but rather because the interviewing and responding can never be separated from interpretations that are non-standardised. It is therefore vital to fully document the procedure used in any research process and demonstrate that categories have been used consistently.

As Kirk and Miller (1986)¹⁷⁴ argue: -

"Qualitative researchers can no longer afford to beg the issue of reliability. While the forte of field

¹⁷⁴ Kirk, J. and Miller, M. (1986) Reliability and Validity in Qualitative Research. London: Sage. Cited in Silverman, David. (2000) Doing Qualitative Research, A Practical Handbook. London: Sage Publications. P.188.

research will always lie in its capability to sort out the validity of propositions, its results will (reasonably) go ignored minus attention to reliability. For reliability to be calculated, it is incumbent on the scientific investigator to document his or her procedure."

Seale (1999)¹⁷⁵ states that external reliability, involving replication of entire studies has been difficult to achieve in practice, due to the difficulties of unique settings which change over time. A more realistic approach is seen as a full account of procedures and methods showing the readers full details so they can test the particular conclusions and evaluate the quality of conclusions. This is what I have tried to achieve within this study.

Internal reliability can be enhanced by ensuring data is relatively free from interpretative 'tying-up'. Peer auditing is a practical way of enhancing the credibility of qualitative research studies. In the data collection and analysis I have endeavoured to use skilled colleagues to test my processes.

It is important to be explicitly clear about one's theoretical assumptions, where the word theory stands for many things such as values, prejudices or subconscious desires.

¹⁷⁵ The Quality of Qualitative Research, Introducing qualitative methods. Op. Cit. P. 157,

Utility

The methods chosen for research must contribute in some way to answering the research questions. The utility of a method is determined by its practicality in usage. In simple terms, if it is too cumbersome to use, then it is low in utility. The methods chosen aim to provide high utility value.

Generalisation

The goal of generalisation is not always an important consideration as a particular case may be worth studying for their own sake. In the case of the evaluation of a one-off training intervention, one may not have concerns as to whether it will work elsewhere. However, in the development of the model of the cost and benefit of training the goal of generalisation is the aim.

Sampling

Mason (1996)¹⁷⁶ states: -

"...I want to suggest that sampling and selection - appropriately conceived and executed - are vitally important strategic elements of qualitative research."

Sampling is an important aspect of research and it is closely linked to the

¹⁷⁶ Mason, J. (1996) Qualitative Researching, London: Sage. P.83

validity of the findings. The theory of sampling is linked to the concept of the 'population', the population referring to all cases whereas the sample is a selection from the population. Ideally, we should survey the whole population, however, generally we consider that it is necessary to sample or select because a complete census of the target population is either impossible, impractical to achieve or simply not necessary. In choosing a sample we have to consider what work it is that we expect the sample to be able to do in respect of the research. It is therefore necessary to examine in what way, and on what basis, data generated from the sample represents the wider population. Sampling therefore concerns establishing an appropriate relationship between the sample and the population.

It is also necessary to choose representative samples and estimate the likelihood of events occurring in similar cases outside of the sample. To achieve this it may be that the process of sampling requires a degree of conceptualisation of the characteristics, attributes, themes and experiences of the variables within the research. There is therefore, a logic of theoretical and purposeful sampling which allows units of the population to be selected to provide meaningful comparisons to the research question.

Patton (1990)¹⁷⁷ states that in quantitative research methods, there is much emphasis on the statistical relevance of a group study, whereas qualitative research focuses on the purposeful selection of the group that will provide the necessary information and data. In other words, a full census is not necessarily superior to a well thought-out sample. Later in this chapter I will discuss the sampling for each of my methods.

Ethics

Ethics are vital considerations for all researchers and cannot be ignored when developing a research strategy. The Market Research Society¹⁷⁸ state: -

'Research is founded on willing co-operation. It depends upon confidence that it is conducted honestly, objectively and without unwelcome intrusion or harm to respondents. Its purpose is to collect and analyse information, and not to influence the opinions of anyone participating in it. It can be contended that all research to some extent is contaminated by the values and views of the researcher.'

Additionally, there will be the wish by the researcher who undertaking the study to provide full information to the individuals subject of the study, without contaminating the research by informing them too specifically about the

¹⁷⁷ Patton, M.Q (1990) Qualitative Evaluation and Research Methods, 2 nd Ed, London: Sage. P.185.

¹⁷⁸ The Market Research Society (2000) http://www.mrs.org.uk

research question being studied. Mason (1996)¹⁷⁹ identifies two ways that ethical issues may impinge upon the qualitative researcher: -

- * The rich and detailed character of much qualitative research can mean intimate engagement with the public and private lives of participants.
- * The changing directions of interest and access during a qualitative study mean that new and unexpected ethical dilemmas are likely to arise during the course of your study.

She suggests that a possible way to confront these problems is to try and clarify the intentions while formulating the research problem, i.e.,

- 1. Ask yourself what is the purpose of the research?
- 2. Examine which volunteers might be interested or affected by the research topic?
- 3. Consider what are the implications for these parties of framing your research topic in the way you have done?¹⁸⁰

^{&#}x27;'^{*} Op. Cit. PP166-7

¹⁸⁰ Op. Cit. PP 29-30

In the context of the police culture and this research the third issue will pose the greatest problem to this study. It is also vital that researchers understand the issue of informed consent. On the face of this it may seem straight forward as the participants are identifiable and will give their consent before the process begins, however, this may not be true consent, but brought about through other persuasive influences. They may also provide information concerning third parties whose consent you have not gained. I therefore felt that it was vital to ensure that at the outset I provided participants with as much detail about the research as possible.

Multiple Methods

Measurement in research is usually undertaken either by qualitative methods or quantitative methods. Research design should involve careful consideration rather than employing the most direct and attractive option. The design should also take account of how different approaches may be combined to improve the process. Judith Bell (1995)¹⁸¹ states: -

"Different styles, traditions or approaches use different methods of collecting data, but no approach prescribes nor automatically rejects any particular method."

Gummesson (2000)¹⁸² uses the metaphor of an iceberg to describe a quality research process. Many researchers are comfortable to look at the 10% mass

Bell, Judith. (1995), Doing your Research Project: A Guide for first-time Researchers in Education and Social Science (2nd Ed.). Buckingham: Open University Press. P.5.
 Qualitative Methods in Management Research (2nd Ed). Op. Cit. PP 35-37.

above the water using such methods as questionnaires. He argues that quality research attempts to a close-up of the remaining 90% by getting beneath the surface, mobilising more resources and getting more involved by using appropriate methods of approach or combinations of approach. I therefore have taken a multiple approach to this study.

Triangulation

Seale (1999)¹⁸³ says of triangulation: -

"The term itself is designed to evoke an analogy with surveying or navigation, in a way which people discover their position on a map by taking bearings on two landmarks, lines from which will intersect at the observer's position."

Used in this way it will assume a single fixed reality that can be known objectively through the use of multiple methods. The fixed reality can be based upon data, methodological approach, theory or the research investigator. This view raises some disquiet around the concept of triangulation and in itself it gives no guarantee of validity. However, it can be argued that multiplication of methods can help deepen an understanding of different aspects of an issue.

Seale (1999)¹⁸⁴ goes on to say of triangulation of methods: -

"...if used with due caution, can enhance the credibility of research by providing an additional way

¹⁸⁴ Op. Cit. P.61

¹⁸³ The Quality of Qualitative Research, Introducing qualitative methods. Op Cit. P.53.

of generating evidence in support of key claims. One does not have to regard it as an 'indefinite' process of infinite regress if it is accepted that the sort of knowledge constructed by social researchers is always provisional, but is nevertheless attempting to convince a sceptical audience."

Triangulation of methods is the most used technique to deepen and enrich understanding of particular settings or events. It can also be an important way of seeking out and accounting for negative instances that contradict emerging or dominant ideas. As Seale (1999)¹⁸⁵ states: -

"Willingness to seek out discomforting evidence, and to allow this to modify general ideas, constitutes the essence of a scientific attitude."

Imperfection is as much a part of research as it is a part of life, you have to do the best you can. One way of achieving the best from limited measures is to use the triangulation approach, based upon the idea that two imperfect measures of the same thing are better than one. Triangulation means looking at the same thing from two or more positions and strictly speaking, from three. A multiple strategy consisting of qualitative research, whilst employing quantitative methods may be a way of providing greater flexibility. None of the measures on its own will be sufficient, but if they all point to the same conclusion, the finding is strengthened. This gives a sort of consensus of measures as highlighted by Mason (1996)¹⁸⁶: -

¹⁸⁵ Op. Cit. P.73

¹⁸⁶ Mason, J. (1996) Qualitative Researching, London: Sage. P.25

"Methods are often combined to corroborate each other so that there is some form of methodological triangulation."

By having a cumulative view of data from different contexts it is possible to improve reliability and validity. However, some authors such as Silverman (2000)¹⁸⁷ do not always support this view as making proper analytical sense and he suggests that it can in fact, create problems. Many theoretical perspectives suggest we cannot simply aggregate data in order to arrive at an overall 'truth'. What is required are properly identified methods and fully analysed data linked to a precise research problem. Before using a chosen method, we need to be satisfied that it will provide valid, reliable and objective data. Choosing simplicity and rigour will often fulfil our needs better than the 'unachievable' full picture.

Fielding and Fielding (1986)¹⁸⁸ suggest that triangulation should operate according to the following rules:-

- Always begin from a theoretical perspective.
- Choose methods and data which will give you an account of structure and meaning from within that perspective (e.g., by showing the structural contexts of the interactions studied).

¹⁸⁷ Op. Cit. P.99

¹⁸⁸ Fielding, N. and Fielding, J. (1986) Linking Data. London: Sage.

I have considered how I can identify the correct methodologies to achieve the best results.

Design of this study

As Hibberd (1990)¹⁸⁹ states: -

"The simple collection of data does not constitute research. To qualify as research, data collection must be purposeful and organised."

The purpose is to answer a question. If the data will not help you answer the question you should not be collecting the data. Any data collected must fit together to help answer the question. In other words, there must be an underlying rationale: reasons for the collection of data and an understanding of how all the data will work together to serve the purpose of the research. This is the rationale for research design.

Taking account of the topics already discussed in this chapter, the design of my research will be descriptive. The approach will be a multiple strategy consisting of a critical review of relevant literature, and mainly qualitative research whilst employing some quantitative methods. These methods have been selected to provide suitable data in order that the aims of the research can be achieved. The

¹⁸⁹ Hibberd, M. (1990) Research an Evaluation. A Manual for Police Officers, London: The Police Foundation. P.60.

design will take account of the constraints that may be placed upon my research, either through time, cost or the organisation. It is intended that the selection of methods will provide a high level of reliability and validity as previously discussed.

Methodologies for this study

Selecting a method or methods is based on what kind of information is sought, from whom and under what circumstances. Usually the methods are chosen early in the project, and once made, they can be difficult to change, although it may be feasible to add supplementary methods during the project. As Robson (1994)¹⁹⁰ states: -

"The rational approach is to ask - given the chosen research problem and the questions, and a decision on research strategy, what methods are most suitable? ... seek to get a broad grounding in all strategies and a broad range of methods, so that you are in a position to make a rational choice."

While clearly, the philosophical underpinning of the research paradigm drives the choice of methodology, I would also argue that the research itself and lessons learned from previous empirical investigations into the topic are also useful indications of what might be suitable methodologies for consideration. There are many methods available. Interviews, questionnaires, and direct observation of

¹⁹⁰ Robson, Colin. (1994) Real World Research: A resource for Social Scientists and Practitioner-Researchers, Oxford: Blackwell. P.188.

different kinds tend to be the most popular. Experimental research also uses some form of controlled observation but the actual techniques used are often specific to the particular field of study. Of course within each of these headings may lie a variety of styles, systems and variants which can focus the process of the study. Robson (1994)¹⁹¹ identifies four rules of thumb for selecting methods:

- To find out what people do in public use direct observation.
- To find out what they do in private, use interviews, questionnaires or diary techniques.
- To find out what they think, feel, believe, use interviews, questionnaires or attitude scales.
- To determine their abilities, or measure their intelligence or personality, use standardised tests.

Whichever method is chosen thought has to be given as to how the data collected can be interpreted. Systems of analysis are as important as the choice of methodology and must be considered at the same time. There is a wide selection of analysis techniques that varies dependent on the type and nature of the data collected, including statistical analysis for quantitative data and grounded theory¹⁹² for qualitative data. The theoretical framework for the data analysis of my study is contained in Chapter Four.

¹⁹¹ Ibid. P.189.

¹⁹² Glaser, Barney G. and Strauss, Anselm, L. (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicargo: Aldine Publishing.

In developing any research project there is skill in achieving a balance between identifying every single possibility and creating a focused study. If possible, it is best to manage research using an agreed proposal, which sets out all of the considerations discussed in this chapter, including the research question, the research design, methodologies, data analysis and constraints.

From my original thoughts and through consultation, I translated the problem into a researchable topic to identify the needs of the PSNI in respect of the costs and benefits of training that can be used by non-economists. Only at this stage was it possible to start to consider the appropriate methodology for the study. The initial question was not which methodology to use, but what did I need to know and why? Then I was able to progress onto what was the best method to collect the information and once collected what to do with the information. The choice of methodologies had to be seen as holistic and not isolated, as Patton (1980)¹⁹³ states: -

"...it is insufficient simply to study and measure parts of a situation by gathering data about isolated variables, scales, or dimensions. In contrast...the holistic approach...is open to gathering data on any number of aspects of the setting under study in order to put together a complete picture (of the event)."

To facilitate this holistic understanding and bearing in mind the constraints and the issues set out previously in this chapter, I decided the following

¹⁹³ Qualitative Evaluation Method. Op. Cit. P.40

methodological approaches would be most appropriate to meet the aim of the study and develop a model to identify the needs of the organisation in respect of the costs and benefits of training in the PSNI: -

Preliminary semi-structured interviews of Senior Management within the RUC.

A Focus Group to develop the questionnaire.

Questionnaires to Sub-Divisional Commanders.

Semi-structured interviews of a range of people who can help identify processes needed to develop a model of costs and benefits.

These will now be discussed in more depth: -

Semi Structured Interviews

Mason (1996)¹⁹⁴ sees qualitative interviewing in one of three ways, in-depth interviews, semi-structured interviews or loosely structured interviews. She states before using such a method, the interviewer should ask: -

- * Why use interviews?
- * Why is it important to speak to or interact with people to generate data?
- * Why a semi-structured approach compared with other approaches?

The answers to these questions are likely to be complex, but should give some of the following reasons: -

- People's knowledge, views, understandings, interpretations, experiences and interactions are meaningful properties with regard to the research questions.
- Interviews are considered a legitimate tool.
- There is benefit in the depth, complexity and roundness of an interview,
 rather that the broad questionnaire-based survey giving a wide surface
 pattern.

¹⁹⁴ Qualitative Researching, Op. Cit. P.38

- It is better to conceptualise oneself as active and reflective in the data generation process, rather than a neutral data collector (if real neutrality is possible anyway).
- The data required may not be readily available through any other process.
- More flexibility than the structured framework of questionnaire surveys.

Interviews are like questionnaires as they are a very common and a highly productive method of research and one of the most popular. A major advantage of the interview is its adaptability. In a questionnaire, responses have to be taken at face value, whereas in an interview the researcher can probe, focus and investigate. Moser and Kalton (1971)¹⁹⁵ describe the interview as: -

"...a conversation between the interviewer and the respondent with the purpose of eliciting certain information from the respondent."

Oppenheim (1992)¹⁹⁶ points out that unlike conversations, the respondents may react in a number of ways to being interviewed, e.g., inaccuracy and flattery at being asked. The interviewer must be aware that these problems exist and approach each subject appropriately. They must also be able to switch off their own personal views and attitudes as this may influence the results. Within the

¹⁹⁵ Moser, C.A. and Kalton, G. (1971), Survey Methods in Social Investigation (2nd Ed.). London: Heinemann. P.271.

¹⁹⁶ Oppenheim, A. N (1992) Questionnaire Design, Interviewing and Attitude Measurement. London: Pinter, P.66.

interview there is a situational context between the interviewer and the interviewee which must be understood and steps taken to ensure it is kept as constant as possible. Cohen and Manion (1994)¹⁹⁷ add: -

"Like fishing, interviewing is an activity requiring careful preparation and much patience, and considerable practice if the eventual reward is to be a worthwhile catch."

I saw interviews as a particularly powerful tool to explore and define the issues at the early stages of my research. Additionally, I saw them as the main data collection method, including investigating motivational factors such as 'why purchase a piece of training?' Interviews have the advantages of giving a better response rate than questionnaires; I can give background information to the respondent and offer standard explanations for problems that arise; and during conceptualisation and re-conceptualisation interviews, I can expand or focus the questions on an ongoing basis. The disadvantages of such an approach are that interviews are costly both in terms of a researchers' personal time and on a costbasis compared to postal questionnaires; interpreting the findings is invariably an involved business; and as I am working alone, they are not suitable for use on large samples. Interviewing requires particular skills and I am fortunate to have received specific training through professional courses at Queens University, Belfast, National Police Training, Bramshill and The Police Foundation, London.

¹⁹⁷ Research Methods in Education, 4 Edn. Op. Cit. P.82.

In general, interviews require meticulous preparation. This includes, devising questions, considering the methods of analysing the responses, preparing the interview schedule, running pilots, revising and finally conducting the interviews. Interviews range from formal where the questions are standardised to informal where the interview is determined by the respondent. This allows the interviewer some freedom to focus and probe, but within a loose structure. People who agree to be interviewed deserve consideration and so it is important to fit in with their plans. Where possible, an interviewer should choose a private, quiet setting at a time when they will not be disturbed. It is also important to have considered how you will record the responses either through use of a tape recorder or by summary notes or a contemporaneous record. Each can have its own advantages and disadvantages. The use of a tape recorder is ethically better as it reduces the chance of introducing your own prejudices into the process when writing up the interviews.

For this study I carried out two sets of interviews. Full details of the conduct of the interviews are contained in Chapter Five.

The first interviews were held during December 1998 when I held introductory interviews with the RUC Head of Personnel, the Head of Training Branch and the officer responsible for development of our Human Resource Department.

Summaries of these interviews were recorded at the time of the interviews.

The second interviews were held during November and December 2000. A semistructured interview schedule was developed and piloted. A total of 14 confidential interviews were conducted with a selected sample of people with key roles within the PSNI. The interviews were recorded from which typed transcripts were produced.

Focus Groups

The development of the focus group methodology, shortly after World War II, is accredited to Robert Merton (sociologist and deviancy theorist). As 'group interviews', they have long been part of the social scientist's research methodology. David Morgan (1997)¹⁹⁸ describes focus groups as group interviews, although not in the sense of a regular exchange between a researcher's questions and the participants' responses. The characteristics of focus groups is on interaction with the group based on topics supplied by the researcher, i.e., -

"The hallmark of focus groups is their explicit use of group interaction to produce data and insights that would be less accessible without the interaction found in a group."

Hibberd (2000)¹⁹⁹ views a focus group as a qualitative method for gaining insight

Morgan, D. (1997) Focus Groups as Qualitative Research (2nd Ed). London: Sage. P.2.
 Hibberd, M. (2000) Focus Groups. Unpublished Papers. London: The Police Foundation.

into the beliefs, attitudes and values that underlie behaviour. They are conducted in a different setting to interviews, which can mean that the data collected are richer than data collected in one-to-one settings. This is particularly important for my study as I am looking at complex issues involving many levels of feelings and experience. Characteristically, Hibberd sees focus groups as semi-structured group sessions, moderated by a group leader, held in an informal setting to collect information on a designated topic.

Like many qualitative methodologies, focus groups are ideally suited to the phenomenological approach to the explanation of social phenomena. In contrast to *positivism*, which assumes an objective external reality to which people react, phenomenology holds that people react to the world they construct individually from their experience. As Marton (1986)²⁰⁰ states: -

"Phenomenography is a research method adapted for mapping the qualitatively different ways in which people experience, conceptualise, perceive and understand various aspects of phenomena in the world around them."

From a phenomenological point of view, I am not interested in the objective reality underlying what the participant said, but in the way they constructed their 'reality'.

²⁰⁰ Marton F. (1986) Phenomenography - a research approach to investigating different understandings of reality. <u>Journal of Thought</u>. 21(3) P. 31.

Emics and Etics

Another way of looking at focus groups is to see them as generating data lying towards one end of a continuum of research data described by Krippendorf (1980)²⁰¹. Data are described as emic if they are naturalistic, or expressed in indigenous form, without the interference of the researcher imposing his or her view on the data. By contrast, data are described as etic if the researcher's personal views are imposed on reality. Because focus groups are relatively speaking an unstructured situation and not fully controlled by the researcher, the data gathered from them lie at the emic end of the continuum.

In what context is a focus group useful?

In my case I decided to use the focus group as highlighted by Hibberd (2000)²⁰² in order to obtain background information on my topic of research. I viewed this as potentially useful for initial explorations of my area of research. From this I intended to design a questionnaire to examine how the costs and benefits of training were linked to the decision-making process. So in this study the focus group was used to direct the research. In such use, the goal was to use it so that it developed something unique for the understanding of the phenomenon under study.

Focus Groups. Op. Cit.

²⁰¹ Krippendorf, K. (1980) Content Analysis: an introduction to its methodology, London: Sage.

The advantages of the focus group is that it produces concentrated data on precise topics. There is relative efficiency compared to individual interviews. The advantages and disadvantages of focus groups over individual semi-structured interviews have been identified by Hess (1968), as quoted by Hibberd (2000)²⁰³. These are summarised as: -

The group working together will produce a wider range of ideas and information and insights than the same number of people interviewed individually. This is especially important as a comment by one group member can spark a 'chain reaction' of comments from other group members. It often happens that when group discussion gets under way, people get interested and involved, and want to contribute, to express their ideas. In a one-to-one interview, where the interviewer is attending wholly to the respondent, it quickly becomes clear that the interviewer is likely to challenge everything that is said. In a group, there is potential solidarity (other people expressing similar ideas) and greater anonymity (attention can turn to others). Responses are not given to individual questions, but to the flow of the discussion. Hence what is said may be more spontaneous, and a better reflection of what the person 'naturally' thinks and possibly more valid.

As typically eight to twelve people are involved in a focus group, it allows more data to be collected in a shorter space of time. In a group setting, original ideas

²⁰³ Focus Groups, Op. Cit.

and insights are more likely to arise 'out of the blue'. Furthermore, the group can develop and explore these ideas more fully than would be possible in individual interviews. The session can be observed by at two people (moderator and comoderator) and the reliability of the interpretation can be checked. Since the moderator has to run the group (which is inevitably more obtrusive than it is one-to-one) it is more acceptable to structure the group, move on, return to topics not fully covered, and so on.

There are also many criticisms and disadvantages which I need to take into account in using a focus group, such as; there is less control than in an individual interview; the small numbers involved, and the convenience nature of the sampling, mean that we are rarely entitled to draw generalisations from focus group (breadth is sacrificed for depth); participants may react to one another; individual's expressed views may not be representative of their actual views; dominant group members may affect the group; the here-and-now nature of the exercise can lead the researcher to have more faith in the findings than may be warranted; summary, analysis and interpretation of the results is difficult, time consuming and potentially very subjective; and the researcher may unwittingly do the opposite of moderating, by providing cues and clues, verbal and nonverbal to participants.

Identifying the Group

Random sampling was not considered appropriate for this focus group, instead a theoretically motivated sample was used to minimise sample bias. As Morgan (1997)²⁰⁴ states, a more structured approach to focus groups is especially useful when there is a strong, pre-existing agenda for the research, as in this case.

Size of group

As a rule of thumb the size of the group should be in the range of 6-10, below 6 it may be difficult to sustain discussion and above 10 it may be difficult to control the discussion.

A focus group of 10 people was conducted on 9th November 1999. The group was made up of a range of sub-divisional Commanders and civilian training managers who were attending a course at National Police Training. The focus group lasted for 45 minutes and there was a discussion around 5 themes which had been brainstormed at the beginning of the process. A non-participating colleague recorded the views of the focus group on flip charts. A full explanation of the process and the data analysis are contained in Chapter Five.

²⁰⁴ Focus Groups as Qualitative Research (2nd Ed). Op. Cit. P.39

Questionnaires

Questionnaires are very popular with researchers. They are relatively easy to administer. They are flexible in that they can be used to collect a wide range of data in a variety of different circumstances. And they are relatively cheap.

Moore (2000)²⁰⁵ contends that questionnaires are good for collecting data on non-contentious and relatively straightforward topics. They are not good for asking about sensitive issues or for exploring complex issues or concepts that are hard to define. He says that respondents are likely to fill them in quickly, giving an immediate rather than a considered response. They are therefore more appropriate for building a broad picture rather than exploring issues in depth.

The primary aim of a questionnaire is to communicate with the respondent. The respondent needs to understand the questions being asked in order to facilitate a suitable response. The design of the questionnaire, like interviews, requires a great deal of time and effort to ensure that all considerations are taken into account and especially wording, length, sequence, type of questions, otherwise there is danger of the questionnaire being useless. Preece (1994)²⁰⁶ states that a questionnaire must be clear, avoid jargon or technical terms, be unambiguous, as simple as possible and do not suggest ideas to the respondent or lead them to

²⁰⁵ Moore, N. (2000) How to do research. The complete guide to designing and managing research projects London: The library Association. P.108.

²⁰⁶ Preece, R. (1994) Starting Research. An Introduction to Academic Research and Dissertation Writing, London: Pinter. P.106.

a particular conclusion.

Preece (1994)²⁰⁷ states: -

"...in a research project, information should not be sought merely to support a pre-determined point of view, but as a genuine attempt to increase knowledge."

The advantages of a questionnaire are that they can be given to large numbers of people simultaneously, it is standardised, anonymous, speedy and cost effective. Surveys based on the use of a questionnaire can often fill in the gaps in the knowledge which could not be filled by in-depth interviewing. Hibberd and Bennett (1990)²⁰⁸ identify three qualities that make a good questionnaire.

- 1. The questions must be understood by the respondent in the way they are intended by the researcher.
- 2. The respondent must be told clearly what to do which questions to answer, which to miss out, how to answer them and so on.
- 3. It must show consideration for the respondent. After all, the respondent is doing you a favour by answering your questions. In recognition, you should make it as easy and clear as possible to complete. Why should a respondent bother to fill in something that has not been carefully prepared?

²⁰⁷ Ibid P 111

²⁰⁸ Hibberd M. and Bennett M. (1990) Questionnaire and Interview Surveys. A manual for Police Officers, London: The Police Foundation. P.14.

Herbert (1990)²⁰⁹ describes three types of questionnaires – Close-ended with a range of possible answers specified with the question; Semi-open-ended with pre-specified answers along with encouragement for open comments; and Open-ended where each question represents a topic and the respondent is asked to comment freely on it.

Questionnaires have the disadvantages of being prone to low validity if not properly planned and piloted. Once the questionnaire is distributed, you cannot get it back for correction, so it is vital to test that it works. Piloting can be done through a pre-test by sending a draft to experts who can give critical and honest opinion, and then after amendment, try with a few people who reflect the real sample. This shows how they react and any difficulties they encountered completing the forms. It is often tempting to pass over the pilot stage, however, it is worth it to prevent the frustration of having to deal with a batch of questionnaires which have been wrongly completed because of a design fault.

In administering a questionnaire we must give clear thought to identifying the sample which will provide us with valid results which represent the population. Often there is low percentage return of questionnaires and those who do return them may not reflect the sample. Such bias from non-response can be ruled out or controlled to some degree by careful selection. In this study it was possible to send questionnaires to the whole population. By doing this, it was hoped that

²⁰⁹ Herbert, M. (1990) Planning your Research Project, London: Cassell. P.55.

even if a person chooses not to participate, their opinion will be reflected in the responses of those who chose to participate in the study. Questionnaires create a mass of data that may be open to bias if the ethical considerations stated earlier are not taken into account. The Market Research Society²¹⁰ have published Key Principles of the MRS Code of Conduct on their Web Site. These provide an ethical and sound approach to research and are summarised at Appendix 1.

The timing for administering a questionnaire is also important for the quality of information it will yield. Moore (2000)²¹¹ highlights the importance of creating a questionnaire that is of the correct length. He states that the longer the questionnaire, the less likely people are to complete it. Good design can make a questionnaire form easy to fill in and focused on a small number of key questions. An improved response rate can be obtained if the questionnaires are sent out promising confidentiality and anonymity, however, this has the disadvantage of providing no further way of examining the answers given by respondents. In addition, use of a follow-up letter can increase the return rate. In this research I choose to use anonymous questionnaires knowing that the themes could be followed up through the interview stage.

Problems associated with questionnaires can be reduced by careful planning and testing and independent overview of the results.

²¹⁰ The Market Research Society (2000) http://www.mrs.org.uk

How to do Research. The complete guide to designing and managing research projects. Op. Cit. PP.109-115

The information gained from the focus group discussed previously was used to develop the questions for the questionnaire. The initial draft was developed to ensure it was short and simple to complete. It was piloted twice and adjusted until it was felt that it was fit for purpose. All sub-divisional Commanders within the RUC were sent the questionnaire in August 2000. A detailed account of the development and administration of the questionnaire is given in Chapter Five.

Chosen methodologies

The aims of this study are: -

- 1. To examine existing systems and processes into the costs and benefits of training which has been completed in Chapter Two.
- 2. To carry out research using various methodological approaches to identify the needs of the organisation in respect of the costs and benefits of training.

 In this chapter I discussed the choice of methods for the research, in Chapter Four, I will examine the framework for the analysis of the data, and in Chapter five, I will discuss the data analysis.
- 3. To develop a logical model for identifying the costs and benefits of training within the PSNI which will be carried out in Chapter Six and Chapter Seven.

This chapter started by examining the background, practical issues and design of research, it has finished with a discussion on my chosen research methodologies to support the second of the aims stated above. Having discussed the issues

associated with research methodology I now have a greater understanding of the complexity and depth of knowledge that is needed to identify an appropriate approach for a study. Too often in the past I have started with the method of research and tried to force it to obtain the necessary data. I have now established a strong commitment to start with the research question and to examine the various elements to identify the most appropriate methodological approach for a study.

In view of this, the selection of methodologies discussed in this chapter are in my view the most appropriate in order to answer the research question in a valid and reliable way. My belief can be summed up in the words of Peter Bramley (1990)²¹²: -

"The objectivity of an evaluation comes from the conviction that if someone else carried out the study he or she would come to similar conclusions."

²¹² Bramley, P. (1990), Evaluating Trainer Effectiveness, Translating Theory into practice, Maidenhead: McGraw - Hill. P.101.

CHAPTER FOUR

A FRAMEWORK FOR ANALYSIS

This dissertation seeks to investigate the needs of the PSNI in respect of the costs and benefits of training and to develop an appropriate model from the literature and empirical data. In Chapter Three, I discussed the design of research methodologies for this study. I made it clear that implicit in research design is the identification and selection of systems to allow proper analysis of the data. This chapter provides the theoretical background for the choice of data analysis for each of my methods of data collection. Such considerations in respect of data treatment will allow meaningful interpretation of the data in order that I can investigate the costs and benefits of training in the PSNI.

The purpose of analysis is to impose order and structure on the data in order to interpret their meaning (Mintzberg (1979)²¹³). The collected data reveal nothing by themselves, they are dormant and brought to life only when put in a coherent framework and meaning can be drawn. Analysis is therefore a process of building a conceptual framework from the empirical data by the process of abstraction and interpretation. Successful data analysis, whether quantitative or

²¹³ Mintzberg, H. (1979) An Emerging Strategy of Direct Research. Administrative Science Quarterly, 29, PP 582-584.

qualitative, requires understanding of a variety of data analysis methods, planning the data analysis and making revisions in the plan as the work develops. As Hibberd (1994)²¹⁴ states: -

"Many surveys are not properly analysed, and consequently their potential is never fully realised. Proper analysis unlocks the secrets of good research."

Once the analysis is finished, it is important to recognise how weaknesses in the data or the analysis affect the conclusions that can properly be drawn. Of course, the study questions as discussed in Chapter Three (methodology), govern the overall analysis, but the form and quality of the data determine what analyses can be performed and what can be inferred from them. Data analysis is more than number crunching. It is an activity which permeates all stages of a study. Concern with analysis should begin during the design of a study, continue as detailed plans are made to collect data in different forms, become the focus of attention after data are collected and be completed only during the results writing and reviewing stages. Early testing of the methodology, findings and concepts will help the overall process. It is vital to analyse the data in a systematic and reliable way. Within this study I have chosen to use three methods to collect the data. Each of these methods has been chosen for their particular strengths as described in Chapter Three. I will now discuss the methods of data analysis for the methodologies selected.

²¹⁴ Hibberd, M. (1994) Using Surveys: A guide for Managers. London: The Home Office Police Research Group. P.25.

The Interviews

Two sets of interviews were carried out in this study. The first set were background interviews used as a method of identifying where the RUC stood with regard to the organisation, training, and evaluation and were carried out at the initial stages of the research. Although there was only a small number of these interviews, they yielded a relatively large amount of data. It was decided that the best method of analysing these data was to summarise the responses. As Bramley (1990)²¹⁵ states this can be done by writing a short passage which gives a summary of the main themes and then to illustrate these by extracting short quotations that are considered to be representative. However, it must be understood that the quotations should only be used to illustrate the summary. Very often the reader of a report may only remember a quote rather than the summary, so an impactive phrase that only represents the view of one respondent may distort the understanding of the report.

The second set of interviews were intended to gather detailed information on the range of views on the costs and benefits of training. Because of this, the process of summarising as described above was insufficient to fully explore the large amount of data from across all of the respondents. Miles and Huberman (1994)²¹⁶ state that there are no clear guidelines for the 'qualitative' analysis of data, and

²¹⁵ Bramley, P. (1990), Evaluating Trainer Effectiveness, Translating Theory into practice.

Maidenhead: McGraw - Hill. P.101.

Maidenhead: McGraw - Hill. P.101.

Miles M. and Huberman M. (1994) Qualitative Data Analysis, London: Sage. P.2

'seen in traditional terms, the reliability and validity of qualitatively derived findings can be seriously in doubt'. There is therefore a very real danger of finding meaning or patterns in data, like the patterns appearing in random numbers, by relying on plausibility. Plausibility is not enough. In addition, it is difficult to assess the validity of many ethnographic conclusions or generalisations, as replication is generally not possible (Hammersley 1990)²¹⁷.

It was therefore vital to identify a suitable approach to the analysis that gave such reliability and validity. The analysis method that I identified was Grounded Theory. Grounded theory is a qualitative methodology that derives its name from the practice of generating theory from research that is "grounded" in data.

Formally introduced by the sociologists Glaser and Anselm in 'The Discovery of Grounded Theory' (1967)²¹⁸ as the result of their research into aspects of American Health Institutions/ This form of analysis emerged as an alternative strategy to more traditional approaches which relied heavily on hypothesis testing, verification techniques and quantitative forms of analysis which were particularly popular in the social sciences at that time.

Glaser and Strauss argued that sociological enquiry had been excessively concerned with empirical testing of theories, and had paid insufficient attention to where theories came from. Their own phenomenological background led them

Hammersley M. (1990) Reading Ethnographic Research, Essex: Longman,

Glaser, B. G. and Strauss, A. L. (1967), The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine Publishing.

to maintain that sociological theories should be concerned with how people make sense of their own world. Since the researcher starts out occupying their own phenomenological position, the primary data is peoples' own experiences of the world. Theory should therefore emerge inductively from the data on those experiences. As explained by two of its major proponents (Strauss & Corbin, 1990)²¹⁹: -

"...the grounded theory approach is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon."

The intention for the data is to develop an account of a phenomenon that identifies the major constructs, or categories in grounded theory terms, their relationships, and the context and process, thus providing a theory of the phenomenon that is much more than a descriptive account (Becker 1993)²²⁰.

Gummesson (2000)²²¹ sees grounded theory as being: -

"...concerned with the generation of theory, the attempt to find new ways of approaching reality, the need to be creative and receptive in order to improve one's understanding."

Health Research, 3, PP.254-260.

221 Gummesson Evert (2000) Qualitative Methods in Managing Research 2nd Ed. London: Sage P.94.

Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage. P.24.

Becker, P.H. (1993) Common pitfalls in published grounded theory research. Qualitative

There is a clear distinction between theory generation and theory testing.

Theories and models should be grounded in the real-world observations rather than be governed by established theory: -

"Since accurate evidence is not so crucial for generating theory, the kind of evidence, as well as the number of cases, is also not so crucial. A single case can indicate a general conceptual category or property; a few more cases can confirm the indication."

The grounded theory process can be simplified into a model that involves: -

- An initial attempt to develop categories that illuminate the data.
- An attempt to saturate these categories with many appropriate cases in order to demonstrate their relevance.
- Developing these categories into a more general analytical framework with relevance to the theories being examined.

To begin with, grounded theory requires that theory is emergent from the data, it does not see these as separate. Data collection, analysis and theory formulation are regarded as reciprocally related, and the iterative approach incorporates explicit procedures to guide this. Research questions are open and general rather than formed as specific hypotheses, and the emergent theory should account for a

²²² Ibid. P.95

phenomenon that is relevant and problematic for those involved (Becker, 1993)²²³.

Two key procedures, asking questions and making comparisons, are specifically detailed to inform and guide analysis and to aid theorising. Similarities across disparate domains are sought in order in order to illuminate the dimensions present in a situation. Less emphasis is placed on the degree to which a given variable presents itself in a situation. An imaginative thinker must have the ability to move between levels of abstraction, with ease and clarity. Glaser and Strauss (1967)²²⁴ advocated that through theoretical sampling, a researcher might extend and broaden the scope of an emerging theory: -

"Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects codes and analyses his data and decides what data to collect next and where to find them in order to develop his theory as it emerges."

This provides an approach to sampling that is theoretical, rather than site or population driven. That is, emphasis is put on making theories as richly complex as possible, rather than on using existing hypotheses or merely applying previous theories. Theoretical sampling is choosing cases that represent different aspects of reality. The actual number of cases needed in a specific study will be determined by saturation, i.e., the diminishing marginal contribution of additional cases, i.e., leads to generalisation. The second core idea is that of the

²²³ Common pitfalls in published grounded theory research. Op. Cit.

Common pitfalls in published grounded theory research. Op. Cit. P.45

The discovery of grounded theory: Strategies for qualitative research. Op. Cit. P.45

constant comparative method which is used as a systematic tool for developing and refining theoretical categories and their properties. Seale (1999)²²⁵ states: -

"It is not a loosely structured free-for-all, in which researchers glance impressionistically through their field notes looking for anecdotes that support their preconceived ideas. Instead it is a rigorous strategy for producing thoroughly saturated theoretical accounts."

The emphasis remains on the theory testing to preserve an aspect of quality. Grounded theory has some distinguishing features designed to maintain the "groundedness" of the approach. Data collection and analysis are deliberately fused, and initial data analysis is used to shape continuing data collection. This is intended to provide the researcher with opportunities for increasing the "density" and "saturation" of recurring categories, as well as for following up unexpected findings. Interweaving data collection and analysis in this way is held to increase insights and clarify the parameters of the emerging theory. As Martin and Turner (1986) ²²⁶ argue, "An emerging grounded theory primarily justifies itself by providing a detailed and carefully crafted account of the area under investigation."

There has been some divergence in the thinking on grounded theory. The central differences between Glaser and Strauss' versions of grounded theory seem to

²²⁵ Seale, C. (1999) The Quality of Qualitative Research, Introducing qualitative methods. London: Sage P.97.

²²⁶ Martin, P.Y. and B.A. Turner. (1986) Grounded Theory and Organizational Research. The Journal of Applied Behavioral Science, (22:2), P.143.

hinge on both epistemological and methodological chasms between approaches. Glaser seems to view grounded theory as a more laissez-faire type of an operation which is inherently flexible and guided primarily by informants and their socially-constructed realities. To him, the informant's world should emerge naturally from the analysis with little effort or detailed attention to process on the part of the researcher. While Strauss was also undoubtedly committed to providing some important insights into the realities of cultural participants, he seems to be relatively more concerned with producing a detailed description of the cultural scene. Moreover, Strauss' repeated emphasis on grounded theory retaining "canons of good science" such as replicability, generalisation, precision, significance and verification may place him much closer to more traditional quantitative doctrines. For this reason, this study will follow a path more closely associated with Strauss.

Grounded theory aims to be a rigorous method by providing detailed and systematic procedures for data collection, analysis and theorising, but it is also concerned with the quality of emergent theory. Strauss and Corbin (1990)²²⁷ provide four central criteria for a good grounded theory: -

- 1. It should fit the phenomenon, provided it has been carefully derived from diverse data and is faithful to the everyday reality of the area;
- 2. It should provide understanding, and be comprehensible to both the persons studied and others involved in the area;

Basics of qualitative research: Grounded theory procedures and techniques. Op. Cit.

- 3. It should provide generality, given that the data are comprehensive, the interpretation conceptual and broad, and the theory includes extensive variation and is abstract enough to be applicable to a wide variety of contexts in the area;
- 4. It should provide control, in the sense of stating the conditions under which the theory applies and providing a basis for action in the area.

Strauss and Corbin (1994)²²⁸, advocate flexibility in method stating that "individual researchers invent specific procedures" and "while we set these procedures and techniques before you, we do not wish to imply rigid adherence to them." Strauss and Corbin (1990)²²⁹. At the same time, they remind their readers that the procedures and canons of grounded theory must be taken seriously "otherwise researchers end up claiming to have used a grounded approach when they have used only some of its procedures or have used them incorrectly."²³⁰

At the heart of grounded theory analysis is the coding process which consists of three types: open, axial, and selective. Open coding is the initial process in grounded theory that involves breaking down, analysis, comparison and categorisation of data. In open coding, incidents or events are labelled and

Basics of qualitative research: Grounded theory procedures and technique. Op. Cit, P.59
Op. Cit. P.6

Strauss, A.L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of qualitative research. Thousand Oaks, CA: Sage. P.276

Axial coding, on the other hand, represents the delineation of hypothetical relationships between categories and sub-categories, while selective coding can be described as the process by which categories are related to the core category, ultimately becoming the basis for the grounded theory. When coding interview data, it might be helpful to utilise the coding scheme or technique illustrated below. This enables the analyst to conceptualise data from both an emic and etic perspective (i.e., from the informant's standpoint and the researcher's standpoint).

data/interview passage > informant's words or phrases > concepts or classifications: -

The process of coding within this study is further discussed in the results of the interviews in Chapter Five.

Theoretical memos refer to descriptions of important categories of generated theory, their properties, dimensions, relations between categories and their conditions. It is important not to underestimate the importance of memoing in grounded theory. Both Glaser and Strauss emphatically stress the importance of this component for "raising the description to a theoretical level through conceptual rendering of the material" (Glaser, (1978))²³¹. Memos can be viewed

²³¹ Glaser, B.G. (1978). Theoretical sensitivity. Mill Valley, CA: Sociology Press. P.84.

as a vehicle for creativity and are central to the development of the emerging theory. Memos formed an important aspect of my analysis process.

Criticisms of Grounded Theory

Grounded theorising may be inappropriate methodology for certain types of problems, especially where it is trying to identify casual links which do not have sequences of behaviour or processes. Brown (1973) cited in Seale (1999)²³² argues: -

"Grounded theory may only be profitable in a fairly limited range of circumstances. The type of material best given to the development of grounded theory...tends to involve relatively short-term processes, sequences of behaviour that are directly observed or can be easily reported upon, and behaviour which has a repetitive character."

Information should be provided "for judging the adequacy of the research process" Strauss and Corbin (1990)²³³. This includes reporting such factors as how theoretical sampling proceeded, what categories emerged and how the core category was selected.

Grounded theory has also been criticised for its failure to acknowledge implicit theories that guide work at an early stage. It is also said that it is clearer about the generation of theories than about their test. Used unintelligently, it can

The Quality of Qualitative Research, Introducing qualitative methods Op. Cit. P.102
Basics of qualitative research: Grounded theory procedures and technique Op. Cit. P.17

degenerate into a somewhat empty building of categories or into a mere smokescreen used to legitimise purely empiricist research (Bryman (1988)²³⁴). However, used intelligently it can provide theory grounded in the data.

Some authors such as Coffey and Atkinson (1996)²³⁵ object to the narrow analytical manner of coding which has been linked to modern computer analysis, which does not reflect the original coding and retrieval approach of Glaser and Strauss. Proper Grounded theory requires a rigorous spirit of self-awareness and self-criticism, as well as openness to new ideas which is often a hallmark of quality studies.

Computer assisted Analysis of Qualitative Data (CAQDAS) can be helpful in doing qualitative analysis for: -

- Speed at handling large volumes of data.
- Improving rigour, including production of counts of phenomena and searching for deviant cases.
- Facilitation of consistent coding schemes.
- Helping with sampling decisions.

Bryman, A. (1988), Quality and Quantity in Social Research. London: Unwin Hyman.

²³⁵ Coffey A. and Atkinson P. (1996) Making Sense of Qualitative Data Analysis: Complementary Strategies. California: Sage.

Consideration was given to use of computer software, however, Coffey and Atkinson (1996)²³⁶ are resolute in maintaining that coding with computer programmes is not analysis. Berkowitz (1997)²³⁷ states: -

"...computer software packages for qualitative data analysis essentially aid in the manipulation of relevant segments of text. While helpful in marking, coding, and moving data segments more quickly and efficiently than can be done manually, the software cannot determine meaningful categories for coding and analysis or define salient themes or factors. In qualitative analysis, as seen above, concepts must take precedence over mechanics: the analytic underpinnings of the procedures must still be supplied by the analyst. Software packages cannot and should not be used as a way of evading the hard intellectual labour of qualitative analysis."

I therefore decided upon use of a card index approach where the research data was set out on cards, thus converting it into a concrete manipulatable form. This allowed me to work with the data and allow the issues to be developed into theoretical understanding.

Analysis of data from the Focus Group

There is relatively little discussion in social science literature on the analysis of focus group data. The predominant themes in the literature are the benefits of

²³⁶ Coffey, A. and Atkinson, P. (1996) Making Sense of Qualitative Data Analysis: Complementary Strategies. California: Sage.

²³⁷ Berkowitz, S. (1997) in Frechtling, J. & Westat L. S. (Eds.) User - friendly Handbook for mixed Method Evaluations. U.S.A.: National Science Foundation. P.72.

focus groups and how to run the focus group process. This may be because as Hibberd $(2000)^{238}$ states: -

"This is the hardest part. As with any purely qualitative data, summarising focus group data and making sense of the findings is both difficult and time consuming."

It is important in analysing such data to remember the purpose of the exercise is to understand the respondent's viewpoint. The purpose of the study must guide the analysis. When, as in this study, the focus group is used in delineating an area for a subsequent questionnaire design, broad issues or domains are all that we need to identify; this does not require intensive analysis. All interpretations must be viewed in the context in which the original views were made and this must take account of the group atmosphere and the participants involved. It is less an evaluation of the participant's view as trying to understand their phenomenological world, or as Marton (1994)²³⁹ puts it, "...describe in what ways people experience the world differently." An understanding of group dynamics is important for focus group as it can assist the researcher in the analysis of the data through an understanding of what was happening in the group as well as why it might have been happening.

Group dynamics are something of a double-edged sword in focus groups – both the single most important asset in promoting discussion amongst participants and

²³⁸ Hibberd, M (2000) Focus Groups. Unpublished Papers. London: The Police Foundation.
²³⁹ Marton, F. (1994) "Phenomenography". In Husen, T. and Postlewaite, N. (Eds) The International Encyclopedia of Education, Oxford: Pergamon. P.91.

the single greatest threat to open discussion of issues by all participants (Robson and Foster, 1989)²⁴⁰. However, when it comes to the analysis of focus group data the same researchers tend to view what is termed 'the group effect' solely in negative terms, as a threat to the authenticity of individual participant's views and experiences. Researchers comment on how difficult (impossible) it is to extract the views of individuals from those of the group, the 'group-think' phenomenon (Janis, 1972²⁴¹), and the contamination of the individual's true response. It is argued that whilst focus groups can provide insight into the experiences of individual participants, the real value of group data is to be found from analysing the interaction between participants.

This point is reinforced by Albrecht, Johnson and Walther (1993)²⁴² who argue that too often, the communication that occurs in focus groups is ignored in the data analysis. They argue that opinions are: -

"...generally determined not by individual information gathering and deliberation but through communication with others."

The analyst's core role is to understand the meaning of the text. This results in a snapshot approach to data analysis, where individual segments of text are brought together as a report. By comparison the annotating-the-scripts approach

²⁴¹ Janis, I.. (1972) Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascos. Boston: Houghton.

²⁴⁰ Robson, S. & Foster, A. (editors) (1989) Qualitative Research in Action. London: Edward Arnold.

²⁴²Albrecht, T. L., Johnson, G. M. and Walther, J. B. (1993) 'Understanding Communication Processes in Focus Groups' in D. L. Morgan (editor) Successful Focus Groups: Advancing the State of the Art. Newbury Park, CA.: Sage. P.54

is more likely to capture the whole moving picture of the unfolding script that is the focus group discussion. Prior to data analysis the moderator can do several things to make data analysis less difficult. These steps include: having notes taken during the focus groups, applying appropriate procedures for transcribing data and summarising big ideas from the focus group immediately upon its completion.

Morgan (1995)²⁴³ and Stewart and Shamdasani (1990)²⁴⁴ advocate the 'cutting and pasting' of text segments and use of content analysis. They see this as a quick and effective method for analysing focus group data. To begin with, the transcript is read through to identify those sections relevant to answering the research question. Sharken (1999)²⁴⁵ says that you should start by reading all the focus group summaries in one sitting, looking for trends (comments that seem to appear repeatedly in the data) and surprises (unexpected comments which are worth noting). She highlights that context and tone are just as important as the reiteration of particular words. If a comment (or a number of comments) seems to be phrased negatively, elicited emotional responses or triggered many other comments, that would be worth noting in the analysis. Suitable passages identified can be isolated. On the basis of this, a classification system can be

²⁴³ Morgan, D. L. (1995) 'Why Things (Sometimes) Go Wrong in Focus Groups', Qualitative Health Research, vol. 5, no. 4, PP. 516 - 523.

Stewart, D. W. & Shamdasani, P. N. (1990) Focus Groups: Theory & Practice. Newbury

²⁴⁵ Sharken S., J. (1999) Conducting Successful Focus Groups Fieldbook. Los Angeles: Amherst H. Wilder Foundation. P.3.

developed to account for the emerging themes and issues. This may need several iterations if the coding is to develop as an accurate reflection of what was said. It is also useful to get an independent observer to read through the material, to check on bias and for possible subjectivity of interpretation. Then the sections relevant to each category can be brought together under a theme. Sections are then summarised, contextualised and related to the research question. This is another point where bias can creep in, so checking by the independent observer is again important.

Krueger (1994)²⁴⁶ states when reporting focus group results, a thorough and adequate description of the selection of participants must be provided. This includes criteria for sampling, how the participants were identified and, the number of participants who eventually took part. He goes on: -

"Remember: The intent of focus groups is to report the views of the participants and not to generalise to larger groups."

Disadvantages of cut and paste

Cut and paste approaches, can fail to capture or even recognise the following events in the unfolding story of the focus groups: -

²⁴⁶ Krueger, R. A. (1994). Focus groups (2nd ed.) Thousand Oaks: Sage.

Participant's comments can be self-contradictory, in other words, what they say at the outset of the group may be different from and directly contradict what they say later. Participants are often aware of these self-contradictions and point these out themselves, others may also point these out and even help explain them.

Participants change their views and opinions in the course of the discussion once they have had an opportunity to hear and reflect on other participant's opinions, through introspection and retrospection. Indeed it is not unusual for participants to think these changes through out loud. Participants expand later on experiences recounted earlier; adding new information, giving the experience a new and sometimes different interpretation or simply placing this experience in the context of another participant's experience.

The questionnaires

For this study the data from the questionnaires were coded in two ways: The first step was to establish how many of the respondents gave each different response to the questions. The number of respondents who choose each response is called frequency and is accompanied by a percentage called percentage frequency. It was considered that the easiest way to facilitate this analysis was to place the results onto an Microsoft excel spreadsheet. This sort of analysis, tackling one question at a time, is called univariate analysis. When one question is analysed in

isolation like this, it is often difficult to decide what the results mean, as Hibberd (1994)²⁴⁷ says: -

"The results may appear to speak for themselves, but it is important not to take them at face value."

If taken on its own, the findings could be virtually meaningless. This is why a second method of coding was used to analyse the open-ended part of each question. This was carried out using a form of content analysis which is defined by Janis (1972)²⁴⁸ as: -

"...any technique (a) for the classification of signvehicles (b) which relies solely upon the judgements (which theoretically may range from perceptual discrimination to sheer guesses) of an analyst or group of analysts as to which sign-vehicles fall into which categories, (c) provided that the analyst's judgements are regarded as the report of a scientific observer."

A sign-vehicle is anything that can carry meaning, usually a word or a group of words.

It was possible to code the responses from the questionnaire. The results will be interpreted against the aims of the research questions. The summary for the results will be a mixture of statistical statements and more qualitative information in the form of quotes.

²⁴⁷ Op. Cit. P.26

²⁴⁸ Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascos. Op. Cit. P.72

The responses can be considered as a complete narrative, by the content and tenor of each section. None of the categories should be determined in advance, although some direction can be suggested by the quantitative results as these are grounded in the responses (Measor and Woods 1991)²⁴⁹.

Summary

In this chapter I have provided the theoretical background for the data analysis for each of my methods of data collection. I have decided to use summarising and grounded theory for analysing the data from the interviews, cutting and pasting for analysing the data from the focus group data and percentage frequency and content analysis for analysing the data from the questionnaires.

Within this chapter I have discovered that effective analysis of collected data is as important as the design of the data collection methodology. It is easy for researchers to collect large amounts of data without having a clear view of how to analyse it. The danger is that interpretation may take place that is not based upon a reliable and valid structure and so improper meaning can emerge.

The considerations in respect of analysing the data collected for this study will provide such a structure and allow meaningful interpretation of the data in order

²⁴⁹ Measor L. and Woods P. (1991) Breakthroughs and Blockages in Ethnographic Research: Contrasting experiences during the 'Changing Schools' Project, in Walford G. (Ed.) Doing Educational Research, London: Routledge. P.59.

that I can investigate the needs of the organisation in respect of the costs and benefits of training in the PSNI. The results of the empirical research along with the review of the literature will allow me to develop a logical model for identifying the costs and benefits of training within the PSNI.

CHAPTER FIVE

DATA ANALYSIS

In Chapter Three and Chapter Four I have considered the most appropriate methods of collecting and analysing data in order to identify the needs of the PSNI in respect of the costs and benefits of training in a reliable and valid way. In this chapter the results of all the data collection and analysis are presented. The emphasis is on systematically and objectively examining the themes and relationships of the data. The analysis and commentary upon the content of the data will be withheld until Chapter Six and Seven. The approaches identified and used are intended to provide as much validity and reliability as possible. However, I have to consider that by the very fact that I am bound up in the process of the research, I cannot claim that another researcher may not find different emphases within the data.

Background Interviews

During December 1998 I held introductory interviews with the RUC Head of Personnel, the Head of Training Branch and the officer responsible for development of our Human Resource department. These interviews were intended to set what Spendolini (1992)²⁵⁰ calls an 'internal benchmark'. He describes this as merely a starting point to begin and identify internal business practices within an organisation. Such interviews would allow me to identify where the organisation stood with regard to valuing training prior to the major literature research and data collection phases of the work. I felt that such an approach would give me an insight into the organisational structures affecting my research. Below are the summaries of the responses given during the interviews. The interviewees were identified through personal knowledge of their roles and responsibilities which indicated that these were the most appropriate people within the organisation to provide the necessary background information. Each interview has been randomly allocated a reference number (B1-B3). As discussed in Chapter Four the interviews were summarised and illustrated using appropriate quotations.

²⁵⁰ Spendolini, M. J. (1992) *The Benchmarking Book*. USA. American Management Association. P.16.

Q. Is there a statement linked to the Force Strategy, which effectively develops the capabilities of personnel to contribute to organisational outcomes?

Three main items were described by respondents: -

- The Training Branch strategic plan 1998-2001.
- ACPO papers of the aims and objectives of policing.
- Community Policing Project.

Respondents stated that the link was not as strong as they might wish.

Respondent B2 stated that "I do not feel that we have all the necessary resources to carry out all training so the (strategic) plan had to be realistic and practical. It was also fluid so that we could manage change and alter the training to meet the organisations needs."

Q. Is there an effective interface with operational managers in our organisation?

Respondents stated that having an effective interface was important, however, the current system was not working successfully.

"The service we provide must be all encompassing. After all we affect everyone through recruitment, selection and the delivery of a Human Resource system.

Our main contact with operational officers should be through the Personnel

Liaison Officers, although I am aware that this could be more effective." B1.

There is also an interface through the Training Consultative Committee and the Training Advisory Group. Divisional Training under the Personnel Liaison Officers provides a direct link for the interchange of ideas.

Q. Are there any links between training and quality procedures e.g. Investors in People.

The RUC is currently looking at accreditation of some courses and linkages to the Training and Employment Agency. Respondents saw such initiatives as important to ensure quality. They also stated that the force could seek Charter Marks and Investor in People awards, however, these are resource intensive. Respondent B3 expressed the view that the emphasis must not be based upon spending of money, but a re-emphasis to proper use of money and perhaps the use of a business excellence model approach. PANI already use Investors in People. B3 believed that we should be able to set a base line and appropriate goals. He thought that the importance is in the processes - not just winning prizes or receiving awards.

"We are currently looking at various benchmarking systems. It may not be so important to achieve the specific awards, but to implement models of best practice. We are continually looking at other Police Forces and outside organisations. We are also looking at external validation of our systems to ensure quality." B1.

Q. What link is there to the organisations performance support system?

The current Staff Appraisal system was the only system mentioned, however as B2 states: -

"Performance and Development Review has little or no relevance to our training.

I believe that this is mainly because there is no competence framework. It is looking at individual training needs. There will be some identification of need through Personnel. An important aspect will be those who are returning to operational duties from headquarters' posts." B2.

As B3 then says: -

"I believe there should be a clear link. I feel we are missing the competence framework. Performance Development Review is the hub of the wheel, but without the spokes, there is no link or comparisons. We need to assess technical and behavioural needs and skills; however, I don't believe we can fully operate without such a framework." B3

It was acknowledged that there are generic competencies within all forces, however, the RUC needs to audit the skills within the service, as a base for our training needs analysis. Organisational needs will be identified through other systems such as the Training Consultative Committee.

Q. What is considered before a decision is taken in respect of whether training is undertaken or not (especially if there are limited resources)?

B3 claimed: -"If a new need arises then there would need to be a new business case for this. Needs analysis is important to identify needs - Evaluation to measure effectiveness and impact of training."

Respondents stated two considerations before training takes place: -

- 1. It will prepare a person for a job they have to undertake, or make a person more capable for the role they are in. For this, Career Development has a place to identify persons for key roles and plotting career paths.
- 2. Organisational shift i.e., developing skills to meet new challenges.

Identification of training needs is required for: -

- prioritising importance deciding how best to deliver training in house,
 externally, distance learning, on-the-job.
- Measurement of the cost of the option, the benefits which are likely to be achieved.

Once identified the training proposals will be presented to a Training Policy

Group who will make decisions on priorities. From this the Training Officer will

produce a strategy and plan which will be ratified by the Training Policy Group.

Q. What tools are available to distinguish what training enhances the organisation whilst remaining value for money (Return on Investment)?

B2 stated there are "None."

However, the respondents saw value for money as very important to the organisation. Especially the need to demonstrate value to the organisation with evaluation at all levels. The organisation needs to be able to say how well it is doing.

"Evaluation Unit does good work but this is focused on reaction level i.e., is the course good? This may not mean that we gauge whether it is what the

organisation needs or what is needed to provide an enhancement to the organisation." B1.

Q. Do we cost training?

Respondents replied that we look at ball park figures for training costs. Nothing more refined than this. B2 stated that we really only look at courses run outside of Training Branch and even these not fully. The reason for this was that there has not been any pressure on the Force to do this.

B3 did claim that it was possible - "I believe that we can get the necessary information calculated through Management Information Unit and the training budget." B3.

Q. What costs are currently considered before a decision is taken on training?

"This is mainly applied to outside training courses e.g., where a decision is taken that it would be more cost effective to bring the trainer to Garnerville rather than send students to England. Steps have been taken with the new Sergeants and Inspectors courses to ensure they are the most cost effective method." B2.

The organisation has not identified any way of costing resource and accommodation costs, etc., or even in terms of what is available. B3 stated "We cannot control costs unless we can identify them."

Costs are not generally considered in determining training needs "although the Evaluation Unit may consider this if requested." B2. Similarly no account is taken of opportunity costs as B1 declared "Opportunity costs are very important. Currently this is based upon a subjective judgement." B1.

Q. If the results of a programme cannot be measured is there a case for not implementing it?

Respondents stated it would depend on the type of training. They identified that some courses would have to run as the police cannot afford not to run them e.g. major incident training. This would be based upon social benefits or social costs in not running such courses.

Q. Is there a requirement in the organisation for a written proposal before a major new programme is adopted?

Respondents were not aware of any mechanism to provide a written proposal before a training programme is adopted.

"No, but we would like to move to this. I would like to see a 'Training Policy Group' which would make decisions on such things." B2.

Q. Is there a requirement for evaluation of training?

Respondents stated that evaluation is very important, and if there isn't evaluation, there will be problems.

It was established that evaluations are usually implemented when training is ongoing to validate the training delivered. B1 said: -

"Most of our evaluations are started after the training has commenced and are intended to check the outcomes of the training against the objectives. The Evaluation Unit are able to provide satisfaction ratings of the training, the knowledge provided by the training, and behavioural change through the transference of the learning to the workplace."

The Force Evaluation Unit currently provide evaluation reports directly to the Training Officer. Training Development Officers are used for trainers and quality checks to ensure trainers are performing to set standards.

B3 spoke of how he would wish to see evaluations conducted: -

"Evaluation should start at initiation of a programme - we need to know from the start what are the issues. We need to assess the type of training, the effects of training at the workplace, and the effects over time."

Q. What information should evaluations provide?

Not all respondents were clear on what information should be provided from evaluations. They wanted to be sure that training was effective and money well spent.

B3 stated that evaluations should "Test the effectiveness of training. Impact on the individual and the contribution to the workplace both immediately and over time. It should provide a measurement of the value for money and the cost benefit. If possible we should be able to compare and contrast courses for value and effectiveness."

Q. What happens to the results of evaluations?

Currently "All of the reports of the evaluation Unit go to the Training Officer before they are disseminated to the relevant department." B2.

Respondents stated that the results should be available to everyone including: -

Training Officer, Trainers, the Deputy Chief Constable, and in the future, Local Commanders who have devolved budgets. The results can be used for the Annual Report, so PANI and the Public can see that training is value for money and effective.

Focus Group

A focus group of 10 people was conducted on 9th November 1999. The purpose of this was to identify themes which would act as initial explorations of my area of research and inform the development of a questionnaire for sub-divisional Commanders in the Royal Ulster Constabulary. The group was made up of a range of deputy sub-divisional Commanders and police and civilian training managers who were attending a National Police Training course entitled 'Getting the most out of Training' and had agreed to participate.

I gave a short introduction about myself, my colleague and my area of research interest. I also gave the group a quick overview of the session and how it would be conducted and ground rules; including the fact that no quotes would be attributable to any individual. I then facilitated the group in an initial brainstorming²⁵¹ session to identify spontaneous issues based upon the title

Osborne, A. F. (1963) Applied Imagination, Principles and Procedures of creative problem solving, 3rd Ed, New York: Charles Scribner's Sons. P.151.

'Training - value for money'. These issues were further discussed and merged to provide five themes. These five themes were seen as a manageable number for the 45 minutes set aside for the focus group. The group were then facilitated through the five themes. There was a good range of discussions between all of the participants, although as facilitator, I tried to ensure that the entire group had an opportunity to partake in the discussions as appropriate. On many of the discussion areas it was necessary to move on to the next theme in order to complete the task in the time given. I did not feel that this detracted from the information gained and I did give an opportunity at the end to review the themes in case any of the participants believed there had not been the opportunity to give a point of view. A colleague who did not participate in the discussion collected the initial brainstorming data on flip charts. The remainder of the discussion was recorded as notes including suitable quotations which supported the debate.

The data was then examined and the main issues coded using the cut and paste method discussed in Chapter Four under the theme headings. The quotes are identified with a number that relates to the contributor (F1-F10). The final results summary is set out below. This was checked by the recording colleague to ensure that the transfer and analysis gave an accurate representation of the original discussion and took account of the context in which the data was collected.

Identifying Training Needs

Many in the group were concerned that training was not currently based upon identified need but a need by the Force to provide training and be able to say they have trained people in respect of that area. F5 stated that "...rarely do forces check if the training provided is based on need, the right length and the right product."

The group then discussed how we currently identify training needs and develop staff. The majority felt that this was not adequately dealt with, but was crucial to training and the value of training and needed to be identified. They stated that where needs were identified, the following processes were in use: -

- Information from appraisals (although this was not as useful as it should be).
- Ad hoc processes, where training needs came up due to failures or mistakes.
- Line managers deciding what was required.
- Formal training needs analysis (not carried out as often as it should be).
- Individuals picking from a Training Directory.
- Action from a feedback interview.

The participants felt that needs analysis and linkage to force goals were generally reactive rather than proactive.

Training linked to force strategy

The participants stated that they did not believe that there was currently a strong link with strategy within the police service as a whole. However, they did believe that it was important for training and needed to be explored.

"There is a need to concentrate on the relevant elements that build up to the goals and objectives of the organisation. Building a jigsaw bit-by-bit." F3.

F8 when discussing linking training to strategy said: -

"It doesn't fully link. In general we are playing lip service, but a new appraisal process may help."

Measuring training as value for money

Participants agreed that it should be possible to measure if training is value for money, although most were of the opinion that it was not currently carried out by police forces. It was agreed that if staff are not properly trained, it is likely to cost the organisation money in the future i.e., will we pay out if an officer makes a mistake?

"There is a need to estimate the worth to you and the operation of your DCU to have an effectively trained person." F7.

The participants then identified some of the types of measurements that are used by evaluators to identify the value of training.

- Student feedback.
- Students' satisfaction forms.
- Officers' success in implementing training.
- Competency.
- Appraisals.
- Evaluation/Review Forms Immediately after training and 3 months after.

The group then discussed if the outcomes of training met the needs identified. In general there was a feeling that training departments were providing good quality training and the majority of the group felt that training was good value for money, despite not being aware of the exact costs involved. However, they felt that the police do not systematically judge value. It was seen as a hit and miss and ad-hoc process.

F5 stated: -

"It is vital in modern policing to judge if the training provided is good value for money. This is especially important with the Best Value Challenge and the onset of devolved budgets."

All of the participants had heard the term 'opportunity costs' for training, but all admitted that it was not currently considered in a formal way. None were aware of it being considered in financial terms.

F8 said: - "It depends on the course and our priorities, operational needs often take precedence."

However, on further discussion it was established that not all the participants understood the implications of opportunity costs and it had different meaning for different people.

Information to judge if training is money well spent

Participants stated that a lot of their views came about because they were not given sufficient information from the organisation to make good decisions. Even members of the group who worked in training departments were not aware of how to obtain good quality information to make proper decisions. The group

came up with the following list of areas that could help in decision making on the value of training: -

- > PDR / Appraisal results.
- > Measures of skills before and after training.
- > How training is linked to corporate plan.
- > Costs of training within the force.
- > Costs of training from other providers.
- > Evaluation results to show if training worthwhile.
- > Return on investment statistics.

Ability to choose outside providers

Italis?

The entire group supported the view that training should be available from other providers. This could be a realistic alternative if commanders had a greater say in spending training money or even had control of their own training budget.

F1 talked of the experience in their force: -

"We do look at other venues and outside providers as we want to look at the best quality and value of training."

The factors that would be considered in making the choice of an outside provider included: -

The ability: -

- ✓ To meet the needs of the organisation better.
- ✓ To provide the same training at a cheaper price.
- ✓ Provide training closer to the workplace.

Questionnaires

The themes identified by the focus group were reviewed to identify questions which could be used in a questionnaire for distribution to Sub-Divisional Commanders within the Royal Ulster Constabulary. At the time of my research there was concern within the force that too many questionnaires were being issued and officers were getting tired of responding. In creating the questionnaire I was conscious that it needed to be focused, short and appropriately worded. An initial draft was drawn up and an initial pilot was carried out during July 2000 with 9 students attending the Operational Commanders Programme at National Police Training, Bramshill. The questionnaire was adjusted to clarify some ambiguity and to focus it further. A further pilot was carried out during August 2000 with 7 Superintendents working at RUC headquarters who all had experience of work as Sub-Divisional Commanders. This draft appeared to be suitable for use as a research instrument for this study.

Sub-Divisional Commanders within the RUC are those, who under the new police structures will have responsibility for training and development of staff and, under the new financial arrangements, will have devolved budgets for training. In view of this it appeared vital to obtain their views on the costs and benefits of training. The population of Sub-Divisional Commanders was 38 and so I decided that it was possible and desirable that the sample should be made up of the whole population. The questionnaires were posted out using the internal mail on 29th August 2000. A copy of the questionnaire is attached as Appendix 2. The questionnaires were anonymous, however, some Commanders did give their service details. A standard follow-up letter was sent to all participants on 18th September along with a further copy of the questionnaire to encourage the sub-Divisional Commanders to respond if they had not already done so. A cut-off date of 30th October 2000 was set for responses to arrive.

A total of 28 completed questionnaires were received equating to a return rate of 73.5%. This is considered a high rate of return for postal questionnaires²⁵². According to Babbie (1995)²⁵³ overall response rate is one guide to the representativeness of the sample. He states: -

"...a response rate of at least 50% is adequate for analysis and reporting. A response rate of at least 60% is good and a response rate of 70% is very good. You should bear in mind however, that

²⁵³ Babbie, E. (1995) The Practice of Social Research. USA: Wadsworth Publishing Co. P.262.

²⁵² The normal average for internal postal surveys within the RUC is approximately 50% - RUC Central statistics Unit 2000.

these are only rough guides; they have no statistical basis and a demonstrated lack of response bias is far more important than high response rate."

I therefore believe that the response rate was encouraging with regard to the interest in this area of study. Each questionnaire was identified by a number (R1 - R28). The number was allocated nominally upon receipt of the questionnaire to ensure confidentiality. The frequency aspects of the questionnaires were recorded onto a Microsoft Excel spreadsheet and then the responses were coded and the comments summarised. The results of the questionnaires are set out below. The numerical summary of the responses was rounded to the nearest 0.5%

Q1. Do you think that the outcomes of training currently provided by the RUC meets the needs at local level?

The majority of respondents 57% (n=16) stated that they did not think that the outcomes of training met the needs at local level; 28.5% (n=8) did believe that the outcomes met the needs; 11% (n=3) added an additional response of neither yes or no; and 3.5% (n=1) left the question unanswered.

39.5% (n=11) of the respondents highlighted that they felt that training was not linked to organisational and individual needs in a real policing context. This criticism was particularly driven by what is seen as training directed from Headquarters, which did not take account of local requirements, for example R22

stated the "...centre dictates what it wants done, not what is actually required to help operational policing."

22% (n=6) felt that training was seen as unimportant and so there was a lack of quality training. Some saw this as a result of lack of budget, resources or time made available for training delivery. R23: "Training in my estimation is viewed as a secondary concern." R2: "Inadequate budget to afford requisite training."

17.5% (n=5) of the respondents stated that there was so much change taking place within the service that training was unable to undertake proper Training Needs Analysis, training is delivered late and therefore, is slow to meet the demands. As a result the Force is left to play catch-up. R8: "With so much change at the moment insufficient time is allowed to train. We are always playing catch up."

7% (n=2) stated that initial training for probationer constables was good, but training for senior constables and supervisors was poor. R7: "Adequate training is given to probationers, however, senior constables and indeed supervisors require much more training on current legislation and procedures."

Q2. Do you consider the current training provided by the RUC represents value for money?

43% (n=12) considered that the current training provided by the RUC was not value for money; 14% (n=4) stated they did consider the training value for money; 39.5% (n=11) did not respond to the initial part of this question; and 3.5% (n=1) added a new response of neither yes nor no.

25% (n=7) stated they were disappointed with the wastage around the current training set-up. In particular they said that often the wrong training was being delivered, training was of the wrong length and much had a poor focus. As R22 said, "There is no coherent strategy to deliver quality policing."

Although some did qualify their stance by saying that there were some excellent trainers providing a good product which may be more cost effective than outside providers. R15: "It represents value for money in that the amount of training undertaken at recruit level and at divisional level with 1 Sergeant and 1 Constable and a Deputy (1 X Constable) could not be purchased from outside agencies/companies at the rates of pay for the above mentioned officers."

14% (n=4) stated that training should be looking at better alternatives and especially the use of local divisional training. R24: - "Training of local officers is expensive and often driven by Training Branch needs not local needs. Too often

we simply are filling courses to suit Training Branch. There is little or no flexibility for local needs."

R28: - "Training should be delivered locally (or at least on a regional basis) where possible."

11% (n=3) stated that the payment of overtime and extraction costs affected training delivery. R6: - "In most Sub Divisions OT (over time) is needed to send personnel for training. With Sections working at minimum levels extractions are difficult."

6 out of the 11 respondents who left the initial part of question 2 unanswered commented that there was a general lack of information, as R19 stated: - "I have insufficient information on training to make a judgement." R4: - "Difficult to judge when I'm unaware of outside training costs or other alternatives for delivering."

Q3. What further information do you think you require to make a considered judgement as to whether the expenditure on training is value for money?

43% (n=12) of the respondents highlighted that they had insufficient information on the costs of training and the expenditure that is required to send an individual

to a specific training event. They felt it was important to have information supplied to see the total costs involved, for example, R25 wrote of the need for a "Detailed breakdown of costs and the costs of alternatives." R15: - "What about a complete inventory of all training, giving times, cost outcomes, etc., held on our computer system?"

25% (n=7) stated that they required information that would advise them of the effectiveness of the training being delivered so they can make judgements. R31 suggested that courses could be classified to aid judgements on value: - "Value of course - classification - essential/desirable/optional."

17.5% (n=5) wanted to have information available on the provision of training from suitable outside providers. R36: - "What does it cost to get similar type outside the organisation?"

11% (n=3) requested that information on all courses and training should be readily available. R1: - "List of courses available within the organisation."

Other comments included database of trained persons and their skills, and proper identification of needs linked to performance. R16: - "A database of persons trained already and costs of training. Additionally some form of succession planning would allow training to be more focused and properly targeted."

Q4. If given the opportunity would you consider buying training from independent providers?

96.5% (n=27) respondents stated they would consider buying training from independent providers if the opportunity arose. Only 3.5% (n=1) responded that they would not use outside providers.

The one respondent who did not support it did state that they were concerned that such use could lead to "local commanders straying into some hare-brained ideas." R2.

The questionnaire then asked - What factors (if any) would you consider in making such a choice?

a) Factors (if any) for using other providers: -

68% (n=17) of the respondents stated that value and cost effectiveness were matters that they would take into account in deciding to use an outside provider to deliver training. R21: - "Better value for money - a trainee from outside provider may cost less than a police officer carrying on a similar function."

35% (n=10) felt that the quality and effectiveness of training provided by other providers would be a consideration in making a decision. R19 stated: - "Quality

of training. Specialism. Competitive costs." Whilst R8 stated: - "Effectiveness of such (outside providers) - can we be more effective."

28.5% (n=8) stated that other providers were more likely to be available when needed and could deliver where needed. R20: - "Training when needed, not when it suits someone else."

25% (n=7) of the respondents saw the professional standing of independent providers as being important. R4 wrote: - "The providers would have a proven track record and professional standing."

22% (n=6) saw the outside influence and different perspective brought by other providers as being important to delivery of training, as R16 said: - "Enables a 'broader outlook' for the recipients (here I mean the police officer can see the attitudes of those outside the service, etc.)."

17.5% (n=5) stated that outside providers would provide agreed performance outcomes for the training delivered. R4: - "The providers would have to contractually agree performance outcome against stated aims."

11% (n=3) commented that they could get as R3 says "Ready made solutions" from other providers.

b) Factors (if any) against using other providers: -

32% (n=9) respondents stated that a lack of understanding of the police context would be a factor against using outside providers, for example R10 stated: "They may not have a knowledge of policing experiences or understand the problems or culture of policing."

28.5% (n=8) highlighted security considerations as a barrier to using other providers, both in terms of confidentiality and the physical security problem of using other training sites. R26 responded "Security, but this has reduced significantly and confidentiality."

17.5% (n=5) commented that outside providers may be more expensive, taking account of associated costs such as subsistence / refreshment allowances and travel costs. R15 stated: - "I would imagine that 'costs' are the most demanding factor when considering outside providers. Secondly, that hire of hall/room or other facilities would impinge on use of those providers. Hotels and even the use of Newforge plus meals, allowances, travelling would/does make this type of training very costly."

7% (n=2) stated that use of other providers would be less effective than the RUC Training Branch. R5 stated: - "They are ignorant of our systems and problems - people within our Force I feel are more understanding and approachable."

7% (n=2) thought that the venues provided by other providers may not be suitable for police training. R12: -"Convenience of venue, if far away, or not appropriate."

7% (n=2) were concerned that the police would lose the control and responsibility for training. R16 believed: - "To an extent we have less control over training input."

Q5. Do you have any additional comments you wish to make?

22% (n=6) commented that there was a need for structured, relevant, and targeted training based upon proper Training Needs Analysis. R21 stated: - "Well trained and knowledgeable police officers provide the bedrock of the service we provide to the public. If we fail to train people properly and sufficiently, the quality of our service must undoubtedly suffer."

11% (n=3) commented that the trainers in the RUC training department were of good quality, however it was often the product that was poor. R5: - "Only that the teaching end of Garnerville was excellent good instructors. Phase training had good instructors but rubbish lessons - repeats - boring - waste of time and money. It was a complete waste. I have attended a number of courses run by an independent provider and each was successfully run."

11% (n=3) stated that there was a need for flexible locally delivered training for local needs. R24 said: - "There is a need for local flexibility for local problems."

7% (n=2) highlighted that training must be properly resourced to be successful, for example R28 stated: - "...time and time again training becomes a casualty of financial pressures. Currently few commanders can afford to release operational officers for training. This real difficulty must be tackled now, if the training needs of the future (which are likely to be considerable) coupled with downsizing are to be managed."

7% (n=2) respondents stated that training must exist against a best value culture.

R20: - "District Commanders should be able to purchase training, etc., from variety of sources - co-ordinating with other district commanders to achieve Value For Money/best value."

7% (n=2) commented that too much training was done to cover the organisation from litigation or to answer critics and not carried out to benefit the organisation. R22 stated: - "We simply need to get a coherent and flexible approach sorted out to the training and make the overriding priority one of providing the best training possible for operational police. Not, as often appears, simply 'ticking a box' to satisfy HMI or HQ."

Semi-structured Interviews

In order to collect a full range of views on the costs and benefits of training, I commenced a set of 14 interviews in November 2000. I wanted to get a wide range of opinion across the police organisation so I chose people who represented various key roles. This follows Bowden's (1996)²⁵⁴ view that the selection of a sample is not so much a statistical issue but to ensure that there will be a "range of perspectives encountered." The spread of roles is given in Table 6.

Those chosen for the interviews were either people identified as having a particular experience or expertise or were recommended to me by persons within roles who believed that they had something to contribute to the research. In these circumstances, Patton (1990)²⁵⁵ believes it may be feasible to use such a group as: -

> "...the validity, meaningfulness and insights generated from qualitative enquiry have more to do with information, richness of the cases selected and the observational / analytical capabilities of the researcher than with sample size."

P.185.

²⁵⁴ Bowden, J. A. (1996) Phenomenographic research - Some methodological issues, Dall'Alba, G. and B. Hasselgren, Eds. Göteborg, Acta Universtatis Gothoburgensis. P.58.

Patton, M. Q. (1990) Qualitative Evaluation and Research Methods, 2 nd Ed, London: Sage.

Table 6. Spread of roles for interviews.

Role	No. of	Comments	
	interviews		
Police Personnel Dept.	1	Responsible for Career Management	
Training Management	2	Both involved in the TED programme	
Training Resources	1	Responsible for developing resources	
Training Evaluation	1	Force Evaluator	
Civilian Personnel Dept.	1	Head of Civilian Personnel	
Civilian Training	1	Senior Trainer	
Change Management Team	2	Both involved in change programme	
Finance Branch	1	Responsibility for TED finance	
Best Value	1	Responsible for Best Value	
National Police Training	1	Experienced trainer and evaluator	
Sub-Divisional Commander	2	Both had experience of training and	
		operational policing	

All of those approached were willing to take part and were keen to have their opinions heard, this may indicate the importance that training is now held within the service.

Interviews were negotiated on the basis of a commitment of half an hour on the part of the interviewee. This was based upon the time I felt that could be expected of busy people and upon the piloting experience. In developing the approach to the interviews, two main issues needed to be considered; these were

confidentiality and suitable semi-structured questions. Booth (1992)²⁵⁶ states that in her terms, a semi-structured approach is suitable since it neither presupposes a frame for information required, as with a structured interview, nor does it have the limitation of the open interview which allows free rein for the interviewee to roam at will. A common structure of questioning was established and is attached as Appendix 3, however, this was adjusted to take account of the role of the interviewee and was flexible enough to allow for focusing or clarification to be made within the interview process. The transcripts contain numerous examples of where I found it necessary to do this. Initial piloting took the form of two interviews, which have not been included in the final data. All interviewees were assured of the confidential nature of the interviews before commencement. The people interviewed were, without exception, supportive and accommodating and found the subject area interesting and important.

The interviews were all recorded using a dictation recorder. Each interview was transcribed by myself. This had the benefit of allowing me to listen to each interview at least 3 times, firstly during the live interview, secondly during the transcription process, and thirdly at the checking of the typed transcript. Each interview was identified with a random number (T1 – T14) and no person other than myself has had access to the names associated with each number.

²⁵⁶ Booth, S. (1992). Learning to Program: A Phemonographic Perspective. Göteborg, Acta Universtatis: Gothoburgensis. P.36.

As discussed in Chapter Four, the coding paradigm suggested initially by Strauss (1987)²⁵⁷ and further refined by Strauss and Corbin (1990)²⁵⁸ was used as a guide during data analysis. Each interview transcript was scrutinised and each issue was written onto an individual index card. Three major types of coding proposed by Strauss (1987) and Strauss and Corbin (1990) were used in this study and are outlined below.

1. Open coding. This initial type of coding involved a close scrutiny of the index cards. The aims of open coding were to begin the unrestricted coding of all data and assign a representational or conceptual label to each issue found on the cards. Similar incidences and phenomena were compared and contrasted with each other and similar phenomena were classified together. At this stage the coding was tentative and subject to modification. The coding was grounded in the data and required me to reflect on these codes in relation to my expertise and knowledge of the related literature. Each of the categories was assigned a name. Names for these categories often surfaced from the words or phrases used by the participants themselves, called "in vivo" codes (Strauss, 1987)²⁵⁹, or were selected from the names that emerged from my professional reading. During open coding, I wrote theoretical memos. Strauss (1987)²⁶⁰ defined these

²⁵⁷ Strauss, A.L. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.

²⁵⁸ Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
²⁵⁹ Op. Cit. P.33

Op. Cit. P.33

260 Op. Cit. P.22

theoretical memos as "...writing in which the researcher puts down the theoretical questions, hypotheses, and summary of codes". This procedure was used to keep track of emerging categories, stimulated further coding and served as a means for integrating theory (attached as Appendix 4).

- 2. Axial coding. In axial coding, an intense analysis was conducted around one category at a time and relationships and patterns in the data were identified. In axial coding and according to the procedures outlined by Strauss and Corbin (1990)²⁶¹, I focused on specifying a category in terms of: the conditions that give rise to it; the context or its specific set of properties in which it is embedded; the action or interaction of strategies by which the data is handled and managed; and the consequences of those strategies (Strauss and Corbin, 1990)²⁶². In this study for example, the following areas were originally coded as separate categories:
 - Training as value for money.
 - The Best Value Challenge.
 - If no value, then why train?

In the axial coding stage, it became clear that relationships existed between and among these concepts, and they were merged into a category labelled 'Training as value for money.'

3. Selective coding. In selective coding, categories were selected which

²⁶¹ Basics of qualitative research: Grounded theory procedures and techniques. Op. Cit. 262 Op. Cit. P.99

accounted for most of the variation in the research elements. These then became a guide to further data collection to clarify and explain issues that had arisen (Strauss, 1987)²⁶³.

After completion of all the interviews I considered the coding process finalised when all the categories were saturated. Saturation was achieved when I was satisfied that no more text could be allocated to that code and the text had been systematically compared for its relevance to other codes. In all, 505 saturated codes were identified, these are set out in Table 7.

histories 25 differt

In Table 7 the column headed 'frequency' refers to the number of passages on cards which were allocated the code in question. The column headed 'No. of respondents' refers to the number of interviewees who included that theme in their interview. In all, five hundred and five passages on cards were coded and whilst this analysis is qualitative rather than quantitative, Table 7 does indicate that some of the codes emerged stronger than others in the sense they were talked about more frequently by the interviewees and were spoken about by more respondents than others.

²⁶³ Op. Cit. P.28

Table 7. Saturated Codes for the interviews.

Code	Frequency	No. of respondents
Appraisal to support training	22	10
Appropriate methods	19	9
Centre of Excellence	. 9	4
Conduct proper evaluation	35	12
Costs help decision making	22	11
Cost of not training	12	8
Effectiveness in filling skills gap	35	10
Evaluation set against objectives	10	7
External collaborations	14	8
Identification of objectives	23	7
Identification of skills gap	27	11
Judge value of training against role	21	10
Know the cost of training	33	14
Measuring effectiveness	16	8
Measuring the cost of training	23	11
Proper Resources	13	7
Return on investment	13	9
Skills needed to carry out TNA	8	7
Training adding value	23	11
Training as value for money	10	7
Training Cycle	8	На при
Training Information	13	. 26 21 6 1 aww.1
Training Needs Analysis (TNA)	37	41 - 2-14 14 15 2 1 15 - 2
Training not 'bums on seats'	16	+ 9 1: 11 1 Mak
Targeted training	19	8 4 4 4
Total	505	

The next stage of the analysis involved looking at the relationships between the codes and the transcripts. I then examined the relationships between the codes and clustered the groups of codes with the strongest associations. This approach is divergent and in the following summaries it will be the qualitative nature and

the relationships between, the codes that will be important. The bases of the clusters identified are: -

- 1. The contribution that the data made to associations.
- 2. My professional knowledge of training and evaluation within a police environment.
- 3. The literature that was reviewed in Chapter Two.

The codes are clustered around the six elements of: -

- ❖ Training context
- Needs analysis
- Evaluation of training
- Cost of training
- Value
- Assessment of value against cost

The order of the elements is not based upon any weighting of importance. In the next section these elements will be summarised and illustrated from the data. The quotations will be identified by the notation T(n) to represent the transcript number.

Training context

Targeted training

Respondents stated that training needs to be targeted on those who need it and it needs to be aimed where it can be utilised immediately.

"Training is about developing something to make a difference..." T1.

"I think that we need clarity on what training is about..." T5.

They stated that there is a need for a clear training strategy that will provide training at the right time. They also stated that there is a need for staff to be trained properly so as to develop skills, confidence and motivation. Training must not be seen by the organisation as a fix-all.

As a respondent said:-

"...training linked to need, not just a knee-jerk reaction, for example, if there is new legislation or criticism of the force. Training is not always the best option."

T10.

One respondent stated that training needs to be so that it can be delivered in a timely fashion: -

"They need the focus on just-in-time training, rather than training months in advance..." T7.

"...of course training should not be seen as a fix-all, many things which we get to deliver are not our function..." T1.

If the police service provides the correct training, it will give staff with the necessary skills to take on extra tasks and to have the confidence to carry out their role better. It will also provide for good career development. Some respondents stated that staff shortages created barriers to sending people to training. Many commanders prefer to have someone on the street, even untrained, rather than to have no-one on the streets at all.

"The bottom line is that we cannot reduce the front line service to the public."

T2.

It was also expressed that training needs to be targeted on the new skills for the new police service: -

"There will be a need to retraining the new civilian approach to policing rather than the military approach required through the height of the conflict and terrorism." T7.

Training Cycle

Respondents stated that there needs to be a systematic approach to training: "So we would be coming around the loop of TNA, design, delivery, evaluation,
fed back into TNA." T13.

"We have to develop a systematic approach to ensure that we incorporate all of the training cycle..." T3.

Concern was raised about how the current training set-up approaches the training cycle, as a respondent said: -

"I believe that police training breaks up the training cycle. It uses separate teams to carry out different aspects of the cycle, for example, there is someone to carry out the Training Needs Analysis, someone else does the design of the course, a further person carries out the delivery of the training and finally there is an evaluation unit. This does not allow the transfer of the various stages around the cycle." T2.

Respondents stated that after evaluation if the needs have not been met by the training, then this should be fed back into the training cycle and allow the redesign of the training.

Training Information

Respondent T14 felt there needed to be a prospectus of available courses and stated: -

"It will show an indication of the area it is aimed at such as criminal justice, public service or for the public. It will show what the course covers and the objectives of the course. It will probably give some indication of the quality, validation, accreditation or benchmark of the course..." T14.

It was felt that commanders should receive performance management information that is easily accessible in the same way as other performance management information is available in the force. There should also be an annual report that can show what has been achieved by training, both by central provision and local provision.

"There may be some sort of annual report on the TED, distributed to all commanders, to show what has been achieved..." T13.

"There will also be micro accounts available which can be given to the Training policy Group. There will therefore be shop window costs and these can be broken down in terms of trainer costs, equipment, administration, etc." T14.

The information distributed should include outcomes of evaluation and the performance of training.

"The results of these will be reported to the Training Officer and then they will be published through the Training policy group to the public and the Policing Board." T14.

It was acknowledged that there should be a measure of how Training Branch are progressing against the business plan and what has been achieved. Information on all these areas will need to be made freely available and accessible.

Training as a centre of excellence

& Bronch

Respondents agreed that Training Branch must work to enhance its standing within the organisation. As T1 stated it must "Become a centre of excellence."

It needs a champion from the top of the organisation who is willing to support the training function and to raise its importance and profile with other senior officers. Training Branch has a responsibility for enhancing its own reputation by being seen to provide a good product and be seen to give people what they want. Respondents felt that if students see that they will benefit from the training, they receive they will want to come back to training to receive more.

"So if we took the time and gave them proof that training works then it will encourage proper training." T12.

"There has been a certain arrogance in the way Training Branch have approached training and they need to ask the customers what they need and find out what training is worthwhile." T7.

"Training Branch has to sell itself and have a good product..." T9.

Training Resources

Respondents said that training must be properly resourced with the necessary equipment and materials. It also needed to be staffed by trainers who have the proper skills and are supported by training managers.

"Training has often not been properly thought out and resourced." T8.

Police and civilian trainers will have to work together to deliver a quality product that provides the necessary context and outputs. Training is often talked about as having a high priority, but in reality, it was felt that it received a low priority. Money was an important issue and respondents stated that this would have to be available and allocated to the right places if training was to be delivered.

"We can also look to developing the training with money from outside such as international funds, we need to find out what is out there and look at the wider environment..." T9.

T1 says: - "Get the right people for jobs within training who want to be there, who have the right qualifications and are given support and guidance." T1 goes on to say "Training is seen as being at the forefront, so we need to have the necessary resources to meet the expectation, not only in terms of people but also in terms of equipment."

Training Branch needs to have proper information technology to support the training function, and would benefit from being on the intra-net. Trainers have good skills but they need more support and development. Trainers stated that others believe that once they have become a trainer then they no longer have any development needs. As T4 confirmed: -

"I think as a Force we have very skilled trainers, but, I think they need supported in order that they can do a better job and meet the needs of the organisation and the individual." T4.

Appropriate Training

Respondents stated it has been all too easy for Training Branch to provide training that suited them as trainers or as the Training Branch. There is a need to examine the most suitable approaches to training which would provide for the needs of the organisation and of the individual.

"...I think there needs to be an opportunity to identify ways for people to meet those training needs." T5.

"The organisation has to start to encourage people to maintain their own skills and knowledge." T8.

The types of approaches identified by respondents included: -

- Modular training.
- On-the-job mentoring.
- Coaching by supervisors.
- Distance learning.
- Computer based training.
- Intra-net training.
- CD ROMs (Information and database).
- Self-development.
- Better and more user friendly information bulletins.

"Training must be flexible, it can't be a very structured syllabus that cannot adjust to change quickly as has been the case in the past." T4.

"Training Branch needs to consider when it delivers training, it should be looking to alternatives where there is less demand on resources..." T2.

Whatever approach is used in training, it must maintain the quality and standards required and expected by the organisation. The training will have to ensure that there is a corporate approach to core issues such as equal opportunities and cultural awareness.

Not 'bums on seats'

Respondents believed that training must not merely consist of getting trainees to attend training and getting them into classrooms. It cannot be a case of throwing training at students or merely ticking boxes, it needs to be meaningful.

"Our training is like a blunderbuss, we fire our training and hope some of it hits the target..." T6.

"I don't think we should be sending 10 people on a course and providing a common curriculum if most people only need certain bits of the course." T5.

"We need to get away from the bums on seats culture, but get the maximum number trained who need trained." T9.

Delivering the wrong training sends out the wrong message to the organisation. But respondents also felt that many stations make the mistake of sending the wrong person to a training event, as they have not tried to identify the correct person for the training and don't want to lose a place on that particular training course. As T12 accepted: -

"A lot of people are sent to training because someone else is unable to go and they have actually just gone to fill a seat." T12.

External Collaborations

Respondents stated that there would be benefit in considering identifying suitable training providers outside of the RUC Training Branch.

"...communications training, computer training could be provided outside perhaps under contract or utilising colleges, universities, etc." T6.

"...if it is a course that is coming out from my budget, and you can go around and decide who is the best provider, then you will seek out that information." T5.

"There is no opportunity to purchase training from local providers, it just isn't catered for, and as you know we are situated beside a technical college." T9.

External accreditation

Respondents stated that external accreditation would be beneficial to training, as it would provide evidence of standards of achievement. These standards would allow trainers and managers to make valid and reliable judgements about the level of attainment that a trainee has achieved.

"In the future the evaluation will be tied to standards..." T3.

"We will also have external validation and accreditation to support the quality of training, we will also permit inspection of our training by statutory bodies such as the Equality Commission, Human Rights Commission to ensure our practices are right." T14.

Needs analysis

Training Needs Analysis

This was the highest frequency of saturated codes with all respondents raising this issue. It was a common thread and is strongly associated with other codes. Respondents all stated that there was an imperative need for Training Needs to be identified.

"...the important thing is to have TNA carried out at the outset. We need to know what the needs are across every function." T11.

Respondents stated that use of proper systems of needs identification would reduce wastage and provide for training to be tailored to meet the needs.

"This revolves around TNA. This must analyse organisational, departmental, local and individual, tailored needs. It will provide for the prioritising of training, only those who need it will receive it. If we have officers and courses x, y and z we will only train them in y if it is necessary for their role, this will reduce the waste." T14.

So students are only sent to training if it is based upon individual need.

"We don't design courses with proper TNA and we don't try and identify the benefits before running the course." T4.

The training needs need to be linked to the overall objectives of the organisation in its strategic plan. As T6 stated: -

"Ultimately what we want is training which is relevant to the officers so they can do their job, and linked to organisational needs, a two-way flow." T6.

T14 said that although there may be an identified need, not all training could be run.

"They (Training Policy Group) will take a very strategic view of this business planning, each product will have to have a clear business case. If the training does not have high enough priority it will not be run." T14.

T5 held the belief that if needs are identified then: -

"...I think there needs to be an opportunity to identify ways for people to meet those training needs." T5.

Identify the Skills Gap

Respondents stated that training should focus on skills to carry out the role. Individuals should be selected for training based upon identified need that enhances the skills to carry out their role better.

"...it is important to understand that each has different needs, so you need to begin by identifying the skills-deficit and develop those skills to ensure they can fully function and are better equipped for the job." T9.

"But generally training I see as developing the skills that are identified for that job. The training is to fill the skill gap." T4.

"They are still not identifying the training needs, so they cannot find the performance gap and therefore they cannot identify the training solutions." T3.

Clear Objectives

Respondents agreed that once training needs have been identified these must be developed into training objectives which can meet the needs of the individual, the process and the organisation.

"There will have to be clear outcomes which we can link to achieving our needs." T7.

"There needs to be arrangement of the objectives of the training course linked to the personal measures identified. These measures need to be specified before the training event." T2.

The training objectives need to be linked to organisational goals to ensure that it will achieve what it is setting out to achieve. As T13 confirmed: -

"...if TED does not contribute to these wider objectives then there is something wrong."

Use of Appraisals

Some respondents raised the issue that the existing appraisal/development system had not helped in identifying need,

"...there is no evidence of a link between PDR and Training Branch and so the needs would not be addressed." T13.

"...We need to establish the other needs, perhaps through better use of the Performance Development Review appraisals, although it is clear that it is not currently working and hasn't produced what was expected." T8.

It was seen that the appraisal system should identify need, link to specific competencies and use personal development plans.

"We use a competency framework for individuals which tries to instil continuous improvement." T1.

"We have arrangements made where objectives are set through personal development plans." And then goes on, "I think it is possible to judge someone's skill levels if there is a proper competence framework. A standard framework which can be applied to all individuals in all roles and posts." T12.

T14 suggested the use of behavioural and technical competencies to link to a performance measurement system: -

"The ideal of what we wish to aspire to is use of the competence framework. By using this we can look at an individual officer's performance and measure that against the competence for their job and specific role, and then consider the gap between the two." T14.

Such a system can also provide a measure of effectiveness for training. In discussing the PDR system, T13 specified: -

"...currently within the PDR System the papers go to Headquarters and don't come down. There needs to be feedback to operational commanders in terms of developing performance to show that as the years go on that the change in performance is fed back to the commander, and it demonstrates that the officer's performance has changed over the last year or so."

The respondents indicated that there is a clear need within the organisation for an effective appraisal / development system to identify both personal needs and skill gaps.

Skills to do a Training Needs Analysis

Respondents stated that staff and in particular, supervisors needed to be given the right skills to identify needs and link it to staff role.

"In the future Inspectors will have to have all the necessary skills to carry out needs analysis as they will be key within the organisation." T9.

In respect of identifying need T13 stated: -

"It is a role and responsibility for line managers to try and determine that and we will have to develop processes that will ensure that happens and they have the necessary skills to make it happen." T13.

Some felt that the skills were not currently available: -

"...more often than not, a person is sent on a course to help the supervisor out and to give the officer the feeling that something is being done to develop their skills." T10.

Or as T1 said it was a waste of time: -

"It has become a paper exercise as we don't have the resources to follow-up."

Evaluation of training

Proper Evaluation

Evaluation was seen as an important requirement for the training function, although, generally the respondents stated that evaluation is not currently properly carried out within the police service.

"...Forces still haven't got their heads around evaluation of training." T3.

They did say there is a need for proper evaluation to be carried out. As T7 confirmed: -

"Outside of what training is delivered from Bramshill we need to evaluate at Training Branch level the courses that are being run. At the moment this appears very ad hoc, it needs to be improved." T7.

T12 believed that proper evaluation will show the success or otherwise of training: -

"If we build in measures as the training is being designed, we can identify what is best measured to evaluate the success of the course." T12.

It was seen that there was a need to develop evaluations beyond end of course 'happy sheets' to longer-term evaluation making use of a range of evaluation tools.

"I have almost discontinued the use of Happy Sheets as they don't tend to tell us a lot except people are glad to be going home... what I think we need to look at is longer term evaluation of the impact of training, and use some indicators to show the success or otherwise of training." T2.

Respondents spoke of a number of evaluation measures that should be considered by the PSNI to properly evaluate training and development. The

respondents did not describe the measures in detail, however, they are included hereto reflect the evaluation methods that respondents would wish be used within the Force: -

- Satisfaction levels
- Course Reviews
- Consultation
- Views of students
- Views of supervisors
- Complaints against police
- Increased quality of files/work
- Public satisfaction
- Reduced wastage
- Reduced extraction to re-investigate
- Reduced civil claims
- Reduced legal costs
- Higher morale
- Reduced drop-out rates from training
- Improvement in competencies
- Progression in career
- Accreditation
- Formal qualifications

Once evaluations are complete and the information is available, it must be used as T12 states: -

"...It is important that we attempt to show benefit in relation to training courses.

Whilst the information may be delayed from the specific training event if we can document the fact that it is showing qualitative and quantitative improvements."

T12.

Evaluation Against Objectives

Respondents stated evaluation should be against the objectives of the training based upon proper needs analysis.

"One way is by post-course evaluation, an assessment or measurement of what a person couldn't do before against what they can do after the training as a result of it." T11.

Respondents saw evaluation being developed at the needs analysis and development stage of the training.

"I don't have a model in mind as the best way of evaluating change, except when we set up the training course we should be building the evaluation before a person sets their foot in a training course. If they have done that then you already know how you are going to assess if the course was a good one..." T5.

"That means that your training is focusing on what outcomes you are after. It will focus on the aims and objectives. If those were in-built from then you would get much better feedback to the training department." T12.

And if evaluation shows that the training interventions have been poor this must be fed back into the training as expressed by T7: -

"If we get feedback on bad courses... we do feed that back to them, for example that a 2 week course could be condensed into one week."

Cost of training

The cost of training

Few respondents knew the cost of training provided by the force.

"...in my experience few know the cost of training." T7.

One respondent estimated the current total budget: -

"I think that the current cost of training is about £89 million plus or minus 10%. It is a lot of money sloshing about without tangible account as to whether it is well spent." T 14.

Respondents stated that as training is currently paid for centrally, this has two effects; firstly commanders do not feel they have to consider the cost of training, and secondly, that cost is less important.

"Because training is done centrally and the costs are top sliced, it wasn't costing me anything...." T5.

"There is also a problem with no-one taking responsibility for costs or budgets within Training Budget... But it goes further for we don't consider the cost of staff in the RUC so it gives the illusion that no-one costs anything and that is at the very heart of this." T2.

Respondents stated that there was a need to know the costs associated with training.

"...if it is coming out of my budget then I want to know how much each training course is going to cost." T5.

As there has been no restriction on the training budget, a laissez-faire attitude to sending staff to training has developed. Officers are sent to training irrespective of the cost or identified need.

"...as there was no restriction on the training available so I could send as many people as I felt I needed." T9.

Knowing the cost of training can help Training Branch to identify wastage and reduce it.

"The use of a common costing model to cost exactly the operations of training, then organising budgets and identifying where there are drains will allow for streamlining." T14.

Costs Help Decision Making

Respondents indicated that commanders need the right information on cost of training in order to make proper judgements with regard to training.

T12 on costing training: -

"It would help Training Branch to know exactly what the cost is for someone attending a course and it might focus minds on whether or not the actual training event is necessary."

T14 responded: -

"Each case will be fully costed and commanders will know how much it will cost for that piece of training, for example it will be £300 to send an officer on Public Order training and so the commander can decide who should attend."

Respondents stated that the model must allow commanders to make direct comparisons with other providers.

"Essentially we must be able to compare our training costs against external providers and other forces." T11.

"It needs to be oranges against oranges." T3.

If the costs of training were known, commanders would want to know what they were getting for their money and they would look at the quality of training they are receiving for their money.

"If I am charged by Training Branch I will want to know what I am getting for my money in great detail, it would have to provide very specific break-down of costs for training." T8. "Training should remain central, but needs to be financed differently, not directly, but from DCU's it is giving training to. That would have a double edged effect - the quality of training would improve as it would be a commodity that Training Branch are supplying, and the DCU would not be just be sending people to fill seats but for a specific purpose" T6.

Measuring the Cost of Training

Respondents stated that measuring the cost of training was important but as T10 stated: -

"It is difficult to express the cost of training, but we need to take account of rooms, trainers, resources, abstractions to attend, in fact all monetary costs."

T14 when asked, how do you see cost stated?, replied: -

"In the Appendix to the TED paper a costing model is shown, this has central, regional, and local costs and includes direct costs of training, training equipment costs, overtime costs, subsistence, etc., the costs of consultants, support costs, administration, client costs, opportunity costs, backfill, travel. Effectively costs at three levels direct costs, support costs and client costs. Detailed breakdown enables scrutinies of big spend areas."

A respondent commented on the measurement of costs as: -

"It is basically splitting costs into direct and indirect costs, plus controllable and uncontrollable costs. The direct costs being the costs of trainers, accommodation costs and so forth, and the indirect costs being overheads...there would be other indirect costs not just those connected to training, for example the cost of the Chief Constable's office...However, from the perspective of Commanders the only cost they may be interested in is direct costs." T11.

Respondents stated that a proper analysis of the cost of training would allow the production of a ready reckoner of costs for training events. The majority of respondents (6 out of 8) who discussed extraction costs stated that the costing model should include the costs of sending an officer to training and the cost of them being away from their work.

"The costing will have to take account of trainer costs, venue costs, accommodation, housekeeping and abstraction costs, i.e., the cost of sending an officer on a training course, their salary and the opportunity costs..." T3.

"But, not just the cost of the course but also the opportunity costs, the cost of the person, overtime to replace them, subs, travel, in other words the hard financial cost to replace them, the operational cost." T7

The other two respondents did not believe that extraction costs should be included and commented: -

"The costs should be produced that just reflect the training, commanders can do the extraction, opportunity costs as these will vary from area to area, so why go down that route?" T9.

"The opportunity costs will be there anyway and incurred by the area command."

T11.

(Neither of these two respondents responses have been included in the Matrix of Codes Table 5.3).

Cost of Not Training

It was stated that training must be seen as a benefit to the organisation and should be portrayed in a positive light. This must be considered as the cost to our service if the organisation does not train.

"We have to bear in mind that all successful organisations need to invest in the training of their staff, it goes without saying." T7.

T11 pointed out that there might be a cost of not sending staff to training: "One expression I have often heard is the cost of not training, so, I think in many
ways it is more about the cost of not sending a person on a training course."

One respondent expressed the view that identifying the costs of 'not training' staff would help.

"The only difficulty I see is how you build in the cost to the organisation if someone has not been trained and for example, someone dies as a result of that lack of training, or can't do Microsoft Project 2000. If you could develop a costing mechanism then I think that would be useful because the person making the decision could see these factors to make a proper decision." T4.

Respondents felt that many commanders do not take account of failure to train staff.

T6 stated: -

"In the operational field one of the greatest problems, bar Divisional Training, is that operational officers can become very rusty, but, there does not seem to be a consideration of the detriment to the overall performance of the organisation by officers not having the full skills to do their job." T6.

When discussing the effect of not training, T3 stated: "I don't think it is in the police training psyche yet." T3.

Value

Value of Training

Respondents stated that there is a need to consider training as value for money and to examine what value staff receives from training.

"Hopefully the new TED strategy will shift the whole focus on training within the organisation in terms of the value of training within the organisation as a whole." T13.

T6 linked this to the Best Value Concept: -

"The Best Value Challenge would have to be applied, are Training Branch providing a service at a cost which couldn't be provided by an outside source?"

T3 stated how the Managing Learning report from HMIC also raised the concept of value: -

"...people have been forced by Managing Learning to consider the value of training. Managing Learning was the first time that there was a link between Human Resources Strategy and lifelong professional development." T3.

T1 when asked how we can gauge the value of training replied: "By asking the question, why?"

The Value of Training against Role.

Respondents stated that the value of training needs to link back to the role which the individual is employed in so that this benefits the organisation. T2 summed this up: -

"I consider the relevance of the training to the individual's role. I want to be clear what role people are involved and the value that will flow from training."

T2.

T1 saw value in training as: -

"Training is about developing something to make a difference, asking the questions how?, why?, from the individual, manager, branch and organisation."

T9 built on this by saying: -

"There is a value both to the organisation and ultimately the community from training and this alone should justify training."

T4 considered the individual: -

"...before I would send them I would consider, when you say value, that they will be able to undertake tasks which they couldn't before." T4.

Training adding value

Respondents stated that individuals or the organisation do not always see training as adding value. They discussed how the value added must be linked to the organisational goals, must provide quality as well as value for money and it must be satisfied in a proportionate way.

"There is not currently the ethos that training can benefit an individual, and if it is linked to their role will improve their performance and so improve the service of the organisation." T10.

"The value should be measured in relation to the goals set by the organisation."

T6.

In respect of training adding value, T14 stated: -

"TED will deal with this within the evaluation specialism, linking it to Best Value and Value for Money. They will not always be based upon measures but quality judgements, it will not be enough to be merely good quality it will need to be good value." T14.

And the added value of training has to be proportionate: -

"The returns must be proportionate to the expense of the training. I need to look at it and ask how much of an investment is this?" T2.

Effectiveness in Filling Skills Gap

Respondents stated that training must be effective in filling the skills gap. They highlighted that they would be looking for improvement in the knowledge, skills and attitudes of trainees as a result of the training. Such effectiveness would ensure that staff have the necessary competencies to carry out their role.

T5 said that: -

"Effectiveness is planned output over actual output, so you need to be able to assess what you are getting against what you hoped to get, after all that is why you sent them on a course in the first place." T5.

They went on to say: -

"...lets' say we train everyone for three days on Lawrence, then what they are really looking for is a sense of whether or not as a result of that training people have modified behaviours or attitudinal change, or, we are introducing things to restrain behaviour that will have an effect on attitudes." T5.

This is reinforced by T4: -

"Yes, I would be assessing how effective it had been in filling the skills gap, and how I would certainly be stopping others from attending any course where the person came back and still couldn't do what was required of them." T4.

T1 sees effectiveness as more than merely filling the needs gap: -

"We need to look to improvement, not merely looking at filling the needs gap.

We use a competency framework for individuals which tries to instil continuous

improvement." T1.

Efficiency can also be seen as increasing the quality of what we produce or producing the same product for less.

"We can then look to either increasing the efficiency by increasing the return from the same resources or achieving the same level of output from reduced resources." T11.

Measuring Effectiveness

Respondents stated that often there were no clear forecasted expectations of what training should achieve. Many courses did not have measures of success and so it was difficult to tell if the training had been a success.

T8 agreed: -

"...with regard to Divisional Training, apart from attendance this is not a measure of success." T8.

"Most RUC courses I know of, you attend the course and then you are considered qualified, but there are no measures. I suppose that technical courses and vocational courses may have measures..." T6.

Examples of such technical courses were given as Firearms training where a person has to hit a given score to complete training, or traffic speed radar training where the person will reach the required performance to qualify to use the radar.

T12 raised the point that some other types of training are not so easy to measure.

"If someone goes on a course and acquires a skill you can observe whether or not the skill has been properly taken on board and whether it is being applied on the job. In many cases some of the skills are just not as easily measured as that, computer skills are easily observable...other skills are just not quite as easy."

T12.

The main types of training seen as difficult to measure were soft skills such as management training.

T2 in trying to provide measures advocates the use of a process model against role for judging success: -

"...if we had roles organised more on a process basis then you can actually make the value judgement against hard measurement, what the organisation is trying to achieve, and what the performance standards are and what improvements we can expect." T2.

Assessment of value against cost

Return on Investment

Respondents thought that identifying the costs and benefits of training were vital if proper judgements were to be made. Many respondents stated that Return on Investment is difficult to do.

T2 said: -

"I think the evaluative assessment link is traditionally very difficult. I think it is problematic to identify the connection between the investment and the return from that investment in operational policing terms." T2.

None of the respondents had done a formal Return on Investment, however all had made an informal judgement on the value of the training against the cost of the training.

T1 stated when considering evaluation linked to cost: -

"I didn't link it in a formal way, but on an individual level I looked at how people had benefited." T1.

T2 stated: -

"It would be a value judgement on how training fitted into my job."

When considering the result of training T8 answered: -

"I got my inspectors to produce a paper to manage sickness absence in the subdivision and a strategy for dealing with it...The paper was a good report which dealt with many practical issues and has created a return in less sickness. I could look at this against the cost of the training course." T8.

Respondents stated that knowing the costs and benefits of training would allow better judgement to be made on worthwhile training and this would lead to a more focused approach.

"If they (courses) are designed with the right indicators, you probably will be able to produce costing in relation to what the benefits of the training were to the force by comparing it to the actual cost of running the training event, and thereby you might be able to change the commanders priorities and in relation to training in general." T12.

Training Value for Money

Respondents stated that training must be value for money and be seen to be an investment if it is to be supported.

"Training Branch would have to work under Best Value Challenge." T6.

And it will be open to scrutiny: -

"...if we become more open to public scrutiny, by say the politicians on the new Policing Board, they will examine it to see if it is money well spent and see the return on investment." T14.

And as the new service emerges: -

"Money will be tight and it cannot be thrown about. We will need to know the worth and value of a training event." T7.

Lessons from other Providers

All interviewees were asked about the use of other providers. They were asked to describe what processes such providers used that made them more effective than our own Training Branch. The areas of good practice identified from outside providers are provided below and will inform the model of costs and benefits of training: -

- Prospectus containing outline of training provided.
- Training Needs Analysis carried out for training.
- ♦ Identified aims, objectives
- ♦ Identified clear outcomes
- ♦ Course Outline
- ◆ Training style/methodology
- ◆ Content of Training
- ◆ Duration of Training
- ♦ Business case/full costs (excluding extraction)
- ♦ Location of Training
- ♦ Evaluation Process

Summary

In this chapter I have presented the results of all the data collection carried out during the research into the area of identifying the costs and benefits of training within the PSNI. Firstly, preliminary interviews were conducted with key stakeholders during December 1988 providing a context for the research. In November 1999 a Focus Group was held to provide themes which would inform a questionnaire for Sub-Divisional Commanders. The questionnaire instrument was sent out to all Sub-Divisional Commanders in August 2000 in order to provide the views of those who have responsibility for staff development and

control of local budgets. Finally, interviews were conducted in November 2000 with 14 people with key roles across the PSNI to obtain a wide range of opinion on the costs and benefits of training.

The information from each of the data collection methods has been fully analysed. I have discovered that proper analysis is a demanding and time consuming task, but one which provides rich rewards in meeting the aim to identify the needs of the organisation in respect of the costs and benefits of training. I have purposefully provided a great deal of information in order to allow proper scrutiny of the results. I have approached the research in such a way to allow the processes to stand up to the scrutiny of experienced colleagues and the academic community. All of these results, along with the literature review carried out in Chapter Two, will form the basis of the new model on costs and benefits of training. In Chapter Six I will reflect on the research process and develop the model.

CHAPTER SIX

REFLECTIONS AND MODELS

In Chapter Five I presented the results of all the data collected. The data presented has been collected using robust methodological approaches as discussed in Chapter Three. The data has been analysed in the most appropriate way based upon my discussions in Chapter Four. The results were put forward in a raw state in order to show how the process was achieved and with suitable examples to illustrate the findings. These findings will have to be processed and interpreted along with the literature reviewed in Chapter Two to develop a logical model for identifying the costs and benefits of training within the PSNI. I will suggest later in this chapter a process that I can use to develop the model anticipated as a conclusion to this thesis. I am now going to reflect on the experience of the research study so far. This is intended to help identify the weaknesses before I proceed to model design.

Self reflection

A key part of qualitative and action research methodologies is the notion 'self reflection' where the researcher actively reflects upon the experience of the study in order to understand and explain the socially constructed reality in which they

are researching. Clandinn and Connolly (1994)²⁶⁴ describe personal experience methods such as field notes, diary and journal entries all provide opportunities for rich reflection. Self-awareness and self-reflection are an important ingredient in credibility of studies. As Scriven (1972)²⁶⁵ states: -

"For the social scientists to refuse to treat their own behaviour as data from which one can learn is really tragic."

Through seeking out and acknowledging one's own subjective state and the effect it may have on the interpretation of the data, bias can be limited, if not completely eliminated.

At the earliest stages of the development of a topic for this thesis I had considered what issue faced the RUC training branch, which also concerned me enough to want to make it the subject of a PhD study. My skills as an evaluator had been developed through the Masters Degree in respect of the Evaluation of the Initial training of Traffic Wardens in the RUC²⁶⁶. During the period of study, I had held an interest into how evaluators could identify the costs and benefits of training for an organisation. It had not been possible within the study of Traffic

²⁶⁶ Meaklim, T. (1997) An Evaluation of the Initial Training of Traffic Wardens within the Royal Ulster Constabulary. Unpublished Disertation: The University of Hull.

²⁶⁴ Clandinn, D. J. & Connolly, F. M. (1994) Personal Experience Methods. In Handbook of Qualitative Research, (Ed) Denzin, N. K. Lincln, Y. S. Thousand Oaks, C.A.: Sage. P.413. ²⁶⁵ Scriven, M. (1972) Pros and Cons about Coal-Face Evaluation. Evaluation Comment No 3 P.99

Wardens Training to examine the costs and benefits and it had been restricted to the first three levels of Kirkpatrick's 267 model of evaluation. Having identified an area for study, there was a need to identify available literature to read in order to understand the underpinning theory and practice. After I had applied to carry out the research and conduct it under the auspices of a Bramshill fellowship, ²⁶⁸ it was clear that the costs and benefits of training were something of which there had been a lot written about with regards to the various theories and the need for analysis was supported in management magazines. However, there was little written from a practical point of view on the subject and few examples existed of case studies or best practice.

Originally the title of this thesis was to be 'Cost benefit Analysis of Training within the RUC'. This decision was based upon a limited knowledge and understanding of how to measure the costs and benefits of training. It soon became clear during the review of available literature, discussed in Chapter Two. that this title was totally inappropriate. In my naivety I had used the title of a particular model in the title without understanding the full consequences of such. 'Cost Benefit Analysis' is a tool for analysing the relation between the costs and the benefits of a project and comparing similar projects on the basis of those

²⁶⁷ Kirkpatrick, D. L. (1994) Evaluating training programs: The four levels. San Francisco:

A Bramshill Fellowship is a scholarship to carry out research in a Police Context and is awarded by National Police Training.

results. Kearsley (1982)²⁶⁹ describes Cost Benefit Analysis as a ratio analysis with the relationship between benefit and cost being directly expressed as the quotient of one divided by the other.

If I had chosen to retain this title it would have restricted the development of the model within a very narrow research area. It became clear that if the study was to effectively develop a model to identify the costs and benefits of training within the PSNI, that it had to start from a neutral viewpoint and allow the theory and empirical evidence to drive the development of the model. In the final period of writing the thesis, the RUC became the Police Service of Northern Ireland and so the title changed again. It was necessary to ensure that changes were made to references to RUC within the paper and that the context was correct.

The initial experience of reviewing the literature was that only a limited number of writers had developed the theory in respect of the costs and benefits of training. Many of the traditional writers merely alluded to the subject and did nothing more than mention that it should be the ultimate form of evaluation. There was a need to expand on how to identify the relevant materials. As the result of training at the Easter School at Hull University in 1998, I began to use the internet to track down suitable publications. I also joined the American Society of Training and Development (ASTD) in order to identify the theory and practice in the United States of America. As a member of the ASTD I had access

²⁶⁹ Kearsley, G. (1982) Costs, benefits and productivity in training systems. London: Addison-Wesley Publishing.

to a chat room that was examining the issues surrounding costs and benefits of training. These strategies led to a dramatic increase in the available information.

The problem moved from too little information to information overload. There was a need to manage the new information and review the publications for relevance once they were in my possession. Many of the articles were extremely interesting, however, they did not provide new information or information linked to my area of research, I had to be ruthless in selecting only that information that would enlighten the study.

The introductory interviews carried out at the beginning of this research were intended to provide an internal benchmark of the RUC. However, it became clear when I first tried to identify people to interview within the organisation that some were more comfortable with the process than others. Looking back on this, it may well have been the case that some senior officers were reluctant to be interviewed for the research, as it may have identified gaps in their own knowledge. As it was, there was not a clear view by any of the respondents of the issues surrounding training, evaluation and the costs and benefits of the training. In hindsight, it would have been beneficial to have carried out a few more initial interviews to try and clarify some of those areas which senior officers were not familiar with. I was too keen at this early stage to fill some of the gaps for myself, although these were not included in the results reported in Chapter Five. It may have been that if this area of research had had a higher profile at the time

of the work commencing, then the interviewees may have been better prepared.

As it was, there was not a great deal of knowledge or interest at the time.

Also during this first stage of the data collection process, it became clear that both Human Resources and Training Branch were in their opinions working to the organisational goals and strategy. However, there was a lack of linkage to each other's priorities. It was obvious that they saw themselves as independent departments within the organisational structure which communicated only on the same basis as any other department within the RUC, rather than having a clear link together. Such lack of interaction could not be conducive to provide for the training needs of the organisation. In fact the structure allowed for an overemphasis of the perceived needs without the link back to the core strategic functions of the organisation.

When I conducted the focus group, I did so using participants who were not members of the RUC. I had decided that the development was intended to identify generic issues for the questionnaire. In view of this it seemed appropriate that I should use people who had the same role but who were not necessarily members of the RUC. This decision was very much based upon the situation I found myself in during 1999 when engaged as a Project Manager at National Police Training at Bramshill. There was a ready access to students on the 'Getting the most out of training' Course. These students had been considering many of the issues I wanted to explore and so they were eager to participate in

the group. I am satisfied that the process delivered the main issues, however, as there was a delay until July 2000 before the piloting of the questionnaire would start, a question arose in my mind as to the need to run a further focus group with officers from the RUC. As it was, with the on-set of the marching season and the Drumcree disturbances, any opportunity to run such an event was lost.

The development of a questionnaire from the issues raised in the focus group was difficult. Advice from the Central Statistics Unit in the RUC was that the Force was at saturation point with regard to questionnaires issued from Headquarters. Many of these questionnaires related to the new policies and processes which needed to be introduced as a result of The Report of the Independent Commission on policing for Northern Ireland. The questionnaire had to be clear and focused and the first few attempts at design were too long and complex. I realised that there was a need to concentrate on the key points and develop a format that could allow the Sub-Divisional commanders to complete the questionnaire in a few minutes. Two pilot surveys were necessary, as there were still design problems identified after the first pilot. I believe that the response rate of 73.5% (n=28) indicates that the format met the targets set for it. The analysis of the questionnaire was relatively straightforward in respect of the primary questions, although the coding of the open parts of the questions was time consuming and a coding frame had to be developed to take account of the responses. There were relatively few variations in the responses so the coding was not overly difficult to conduct.

The semi-structured interviews were developed from the questionnaire responses with a view to drilling down into some of the issues and obtaining rich information. The interviews were challenging as there had been a strict time constraint negotiated with the interviewees and yet I wanted to give them an opportunity to speak in as much depth as possible. Initially only six interviews had been considered restricted to Sub-Divisional Commanders. It would have been a way of clarifying the responses from the questionnaires. However, upon further reflection I was struck by the limitations of restricting interviews to operational officers and so it was felt that there was a need and a justification in getting a wide range of views from all parts of the organisation.

In order to do this, I had to try and identify a full range of people from the RUC and capture a representative sample. As stated earlier in this thesis, the selection was to concentrate upon a range of perspectives²⁷⁰ rather than on a representative sample of the population. As it was, the final number interviewed was 14. This was a large number to be facilitated in a busy organisation, and not least, with the difficulties of identifying diary times that suited the interviewee and myself.

Initially it was believed that the best method to record interviews was to take contemporaneous notes of the interviews as they were conducted. As a police officer I was well used to the process. However, I was also well aware that the

²⁷⁰ Bowden, J. A. (1996) *Phenomenographic research - Some methodological issues*. Dall'Alba, G. and Hasselgren, B. Eds. Goteborg, Acta Univertatis Gothoburgensis.

taking of such notes tends to interrupt the flow of questions and tends to make the interviews longer. There were issues around the amount of time needed to have access to each individual person. At an Easter School at the University of Hull the issues of recording of interviews were explored, including the use of taped interviews. I had some initial unease that the tape recorder could prevent a full and frank discussion; that interviewees would have concerns about their anonymity, and some people might feel uncomfortable with the use of a tape recorder. However, after consideration it was felt that the tape recording of the interviews would be the best option.

Trials were carried out to make sure that the tape recorder would be suitable and where it could be best positioned for maximum effectiveness. I ensured that I explained its use to each of the interviewees, especially to emphasise the confidential nature of the interview. Although the experience was that some interviewees were surprised when told that the interviews would be tape recorded, none refused, and most seemed comfortable with its use. The experience of the use of the tape recorded was enlightening for me as I soon realised that it allowed me to access the interviews on numerous occasions, in fact three separate occasions, firstly, during the live interview, secondly, during the transcribing and finally in checking the transcription. Although I had previously carried out taped interviews within the police environment, typists had in general transcribed these and so the amount of insight obtained by doing my own transcription was new to me. It was clear that if I had relied on notes

then much of the emphasis and meaning from the interviews might have been lost. Through the process of interviewing and transcription, I felt that I had a greater affinity with each interviewee which was invaluable at the analysis phase.

The experience of the analysis of the interviews was very different to that of the questionnaires, whereas the questionnaires had been reasonably easy to code, probably due to the structured nature of the questions and the commonality of the sample. The use of Grounded Theory to analyse the interviews required a large amount of effort and a personal commitment that I had not considered before the process got underway. I wanted to ensure that the analysis would produce valid and reliable results which could guide the development of the model. The amount of information gained from the 14 interviews was extensive and the transfer onto individual index cards took longer than expected and resulted in over 500 individual cards. The various coding processes took place over a number of weeks with a commitment on my behalf to ensure that the continuity was maintained. I found this required me to work on the analysis every night (during weekdays) or day (during weekends) and it also required me to continually re-immerse myself in the coding already done.

Once all 505 codes were saturated, I felt very satisfied that all aspects of the process had been conducted to the best of my ability. The understanding of the data developed at this stage made the clustering of associated codes simpler and therefore, the development of the six elements. It also made it easier to identify

suitable illustrative quotes. As an additional check on my coding I asked a trusted colleague who has experience of Grounded Theory to review my work and analyse the process. His comments with regard to some of my arguments within the reporting led to a further review of the six elements and the related evidence. This in my opinion, has added to the overall robustness of the process.

The regime of strict critical reflection recommended by my supervisor has proved to be a very powerful tool in the development and review of the practices within this research study. It has forced me to consider and use approaches which I may have otherwise not chosen or would have ignored. The robustness of the outcomes have benefited from this self-reflection and it has made me consider how I approach major pieces of work within my police role.

On 4th November 2001 the Royal Ulster Constabulary became the Police Service of Northern Ireland. This change to the name required some re-writing to ensure that the name used within this paper reflected the proper context. As stated earlier the title of the thesis had to change again to reflect the new name.

Developing the Model

Since the purpose of this thesis is to develop a model of costs and benefits for training within the PSNI, it was necessary for me to reflect on what a model is and how it can help the research process. The Oxford English dictionary definition of model is a simplified or idealised description or conception of a particular system, situation or process that is put forward as a basis for calculations, predictions, or further investigations²⁷¹. A model can be seen as an abstract representation of a system and can provide a way of thinking about any kind of problem. Models usually attempt to give a broad survey of the real world and include such properties as boundaries, inputs, outputs, components, structure, its integrity and its coherency. A model can therefore facilitate research work by tackling unstructured real world problems. We as human beings are able to create the means of enabling ends to be pursued and to do so on the basis of conscious selection between alternatives. Wilson (1993)²⁷² suggests the following definition: -

"A model is the explicit interpretation of one's understanding of a situation, or merely of one's ideas about the situation. It can be expressed in mathematics, symbols or words, but it is essentially a description of entities, processes or attributes and the relationships between them. It may be prescriptive or illustrative, but above all, it must be useful."

²⁷¹ The Oxford English Dictionary, 2nd Ed. (1989) Oxford :Clarendon Press. Vol IX P. 941 Wilson, B. (1993) Systems: Concepts, Methodologies and Applications. (2nd Ed) Chichester: John Wiley and Sons. P.11.

Modelling is therefore something that we all do, whether it is a conscious or an unconscious activity. It precedes every decision in that some assessment will have to be made of the likely outcome of that decision, however superficial the assessment may be. It precedes the formulation of an opinion. Theoretical model building activity, if it is to be useful in any practical sense, will have to interact constantly with the work of systems within particular disciplines. It also needs to be accessible to other disciplines in order to comply to a basic language of ideas that are meta-disciplinary. De Neufville and Stafford (1971) ²⁷³ see model building and systematic thinking as the formulation of objectives: -

"...therefore the ultimate purpose is to develop an application for the relative effectiveness with which selected alternatives meet some set goals."

The term "model" has several meanings when used in discussions regarding training programmes, but can be defined as "the salient characteristics of a particular program" (Fagan & Wise, 1994)²⁷⁴.

The choice of a model reflects the theories, values, assumptions and belief statements under which we operate. Whilst models can be developed from available facts, Silverman (2000)²⁷⁵ states that facts are always subsidiary to theories. He asserts that successful dissertations display 'independent critical

²⁷³ De Neufville, R and Stafford J. H. (1971) Systems Analysis for Engineers and Managers. New York: McGraw-Hill, P.41

²⁷⁴ Fagan, T. K., and Wise, P. S. (1994) School Psychology: Past, Present, and Future, New York: Longman. P.27

²⁷⁵ Silverman D,(2000) Doing Qualitative Research, A Practical Handbook. London: Sage Publications Ltd. P.75

thought' by engaging theory.

Checkland (1999)²⁷⁶ describes a model as: -

"...an intellectual construct, descriptive of an entity in which at least one observer has an interest."

In this case the writer believes that the observer may wish to relate the model and, if appropriate, its mechanisms to observables in the real world. When this is done, he believes that it frequently leads, understandably, but not always accurately, to descriptions of the world couched in terms of models as if all the world was identical.

O'Brien (1993)²⁷⁷ uses the analogy of a kaleidoscope to describe what theory is:

"A kaleidoscope..[is] the childs's toy consisting of a tube, a number of lenses and fragments of translucent, coloured glass or plastic. When you turn the tube and look down the lens of the kaleidoscope the shapes and colours, visible at the bottom change. As the tube is turned, different lenses come into play and the combinations of colour and shape shift from one pattern to another. In a similar way, we can see social theory as a sort of kaleidoscope- by shifting theoretical perspective the world under investigation also changes shape."

Models provide an overall framework for how we look at reality. Silverman²⁷⁸ sees a model telling us what reality is like and the basic elements it contains

²⁷⁶ Checkland P. (1999) Systems Thinking, Systems Practice. Chichester: J Wiley. P.315

O'Brien M. (1993) Social research and sociology, in N. Gilbert (Ed), Researching Social Life. London: Sage. PP.10-11

²⁷⁸ Doing Qualitative Research, A Practical Handbook. Op. Cit. P77

(ontology)^a and the nature and status of knowledge (epistemology)^b. Cohen and Manion (1989)²⁷⁹ give an explanation of models in research as being "explanatory devices or schemes having a broadly conceptual framework...to give a more graphic or visual representation of a given phenomenon." Guba and Lincon (1994)²⁸⁰ express the view that models roughly correspond to what are more grandly referred to as paradigms. It can therefore be seen that theorising from data does not stop with the refinement of hypotheses.

As I have discussed earlier there is a lack of a model of the costs and benefits of training within the police service in the literature, so there is little guidance as to how a model might look. It is my intention to develop generalisations out of the testing of the hypotheses and build theories into a conceptual model. Of course, the choice in use of various methods must be linked to both methodological decisions and theoretical decisions. These decisions will not only relate to how we conceptualise the world we live in, but also my theory of how the research subjects think about things. Of course, theory only becomes worthwhile when it is used to explain something and in this research I intend to develop a working model to examine the costs and benefits relating to training.

a science that treats the principals of pure being; that part of metaphysics which treats of the nature and essence of things. the theory of knowledge.

Cohen, L. and Manion, L.(1989) Research Methods in Education. London: Routledge. P.16. Guba, E. G. and Lincoln, Y. S. (1994) Competing paradigms in qualitative research in N. Denzin and Y Lincoln (eds), Handbook of Qualitative Research. London: Sage PP.105-117

Guba and Lincoln (1994)²⁸¹ propose four basic inquiry paradigms: positivism, postpositivism, critical theory and constructivism^c. They have espoused the last of these and have written widely about it. Following their lead, much qualitative research today is construed as interpretive science within a constructivist paradigm. They claim that the mental constructions are related to 'tangible entities', which would thus appear to have some reality independent of the constructions.

It seems to me that any research paradigm has to take some of its beliefs on trust. In other words, every research paradigm is instructed to some extent by ideology. For some researchers this ideology appears to be held in large part as a set of beliefs without reason. My experience suggests to me that change requires a non-positivist approach. It appears that many academics that find themselves in the role of change agents are led eventually towards a more flexible approach to research. It seems apparent to me that my mental frameworks colour what I observe. But just as apparent, reality has some influence on my perception. To phrase it differently, my frameworks and reality each account for some of the variance in what I perceive. What is needed, it seems to me, is a process that allows both of these to have a role.

²⁸¹ Ibid.

c constructivist paradigm is the principle of building and following positive structures.

Yet if we are to think seriously about the world, and act effectively in it, some sort of simplified map of reality, some theory, concept, model, paradigm is necessary. Simplified paradigms or maps are indispensable for human thought and action. On the one hand, we may explicitly formulate theories or models and consciously use them as a guide or alternatively, we may assume that we will act only in terms of specific "objective" facts. We need explicit or implicit models so as to be able to: -

- 1. order and generalise about reality;
- 2. understand causal relationships among phenomena;
- 3. anticipate and, if we are lucky, predict future developments;
- 4. distinguish what is important from what is unimportant; and
- 5. show us what paths we should take to achieve our goals.

Every model or map is an abstraction and will be more useful for some purposes than for others. Huntington²⁸² sets out his view on the relative need for Paradigms and Models which is laid out below in Table 8. Using Huntington's definitions provides a clear direction in respect of the development of a model for this study rather than use of a paradigm. This study is particularly driven by the need for a useful outcome that can be tested in the real world and be improved over time.

²⁸² Huntington Samuel, (1994) "The New Era in World Politics," chapter One in *The Clash of Civilizations and the Remaking of World Order* at http://www.washingtonpost.com

Table 8. Paradigms and Models

Models	Paradigms
Designed to be tested (scientific) or	Assumed but not tested. (May become
cannot be tested/disproved	testable if the context is enlarged, or may be
(metaphysical)	untestable).
Models are constructed for usefulness,	
and many alternatives may be used by	"landscape," and use a similar symbol
the same person for different	structure.
applications.	
Although a model may become	When a paradigm becomes "subconscious" it
commonly used, it can easily be	begins to define the "reality" of personal
replaced with "improvements."	experience and difficult to replace.
We often are very pleased to see new	We may become blind to many of our
innovations and anticipate the	observations when they do not fit our
prospects of new model improvements	
With pleasure.	"reality."
If we CANNOT make a change to an	If we MUST change a paradigm that has
entirely new and improved model, we	defined our "reality" it is very difficult and
are resentful and protest loudly.	causes high anxiety, confusion, depression.
	One may fight for a paradigm, even give
	one's life for it if the interpretation of reality
	is dear, and defines one's self and self-value.
Confused with reality.	A language may be built upon a cortain
	A language may be built upon a certain
Is intended to have clear definitions	paradigm (world view), and make it difficult to communicate when the world view is
that can be used to explain and Compare the terms.	changed.
	A paradigm may be associated with a
awareness.	"consciousness" level (perception of
I ·	relationships and interconnections).
	Paradigms may become models, but a re-
Within the same paradigm.	definition of the scale, scope and universe
	usually is required.
	Many "insoluble problems" have no solution
changes in the models. Businesses	until the paradigm is changed. Einstein said,
unction within a common paradigm.	"Few real problems can be solved with the
New models are "marketable."	same consciousness from which they arose."
	(The discussion of "sustainability" has no
	solution within our prevailing paradigm!)

Soft Systems Methodology

This research study is to develop the most appropriate model of costs and benefits of training within the PSNI. It does not indicate that it is the only model that may work, or that at some future time that it cannot be reviewed and improved to take account of changing circumstances and improved internal processes. It was from this viewpoint that I began to look at how I would develop a model for identifying the costs and benefits of training in the PSNI. It was clear from the previous passages that it had to be flexible and able to accommodate the theoretical and empirical data already collected.

Soft Systems Methodology (SSM) is an approach to tackling complex and 'difficult' management problems. It is based on 'Systems thinking', which enables it to be highly defined and described, but allows it to be flexible in use and broad in scope. It can be seen as a development from the 'systems analysis' that emerged within the engineering disciplines and profession in the 1960's. The success of 'hard' systems thinking made it almost inevitable that systems analysis of this kind would be extended to social problems.

This was a seizure upon the principles of system analysis which in Checkland's (1993)²⁸³ words states: -

"The core of all the versions of systems thinking is that they are goal - orientated. Their implicit assumption is that the problem which the systems analyst faces can be expressed in the form: How can we provide an efficient means to meet the objective?"

The objective in this case may be described as utopian as the system is trying to organise the components and their interactions so as to achieve the desired and presumably desirable goal. The difficulty in the application of such a method is to manage problems where the goals are often obscure. It was the development of processes to deal with such fuzzy problems which have led to the development of the soft systems approach.

Soft systems methodology has a number of distinct characteristics which make it unlike conventional problem solving methods. Weber (1904) quoted in Checkland and Scholes (1999)²⁸⁴ used the phrase to describe the pure intellectual constructions which can then be used analytically in the investigation of real-world examples. His account of bureaucracy as an ideal type was not intended as a description of something in the real world, but rather an idea which could be used to study real-world examples of bureaucracy. In this way we can see SSM as an ideal type. From a methodological point of view it will provide for the

 ²⁸³ Checkland P. (1993) Systems Thinking, Systems Practice. John Wiley & Sons. Chichester
 ²⁸⁴ Checkland P. & Scholes J. (1999) Soft Systems Methodology in Action,. Chichester: John Wiley & Sons. P.58

emergence of ideas in a form which its users find comfortable in the particular situation they are in.

Three points stand out which make SSM unusual: emphasis is placed on the describing the *problem situation'* rather than trying to identify 'problems'; the aim is to *improve the problem situation* rather than seek 'solutions', and that the 'world view's' of as many interested parties as possible are sought and explored.

Key Ideas of Soft Systems Methodology

'Problem Situations'

An assumption behind the approach is that conventional problem solving approaches tend to fail in complex situations through excessive attention to identifying 'problems' and seeking 'solutions'. The reality, it is argued is that in complex situations this leads to premature decisions being made about the nature of possible problems which, in turn, limit our views. By focusing on the situation in which potential problems are located, suspending judgement on the nature of what the problems might be and recognising that different people may see things in significantly different ways, this tendency can be reduced.

Improving the Situation

If it is difficult to identity and define 'problems' in the conventional sense, a different approach to how one deals with the situation is required. SSM argues

that clearly identified improvement will frequently be extremely worthwhile, even if it does not comprise a 'solution' in the conventional sense.

'Worlds'

Part of the difficulty, it is argued, is that in the complex situations we encounter in daily life in organisations, different people will see things in different ways. We all bring different 'world views' to bear, in other words, our own highly individual sets of assumptions and values. Usually, these tend to be down-played or ignored. In SSM, they are elicited and recognised.

The Approach

In order to achieve improvement to a problem situation, SSM uses a seven-stage approach which is shown diagrammatically in Figure 5. The terminology used to describe this is as follows:

Stage 1: The term 'the problem situation (unstructured)' is used to describe the situation as it is. This is the world we experience. We will probably never understand it in all its complexity.

Stage 2: The methodology starts by investigating the problem situation and producing an account of it on paper. This is called 'the problem situation expressed.' As much as possible of the situation as possible is captured through a

diagrammatic representation. A diagrammatic representation in this form is called a 'rich picture' of the problem situation.

- Stage 3. From this representation, a 'Root Definition' is drawn up. A 'root definition' is a formal expression of something that is required in order to meet some need and it is expressed in terms of systems ideas. Whatever is required may, or may not, be present in the problem situation.
- Stage 4. A Root Definition, therefore, describes something that is required. From this a statement is made of what must be in place in order for this requirement to be met. This is called a 'conceptual model'. It takes the form of an activity diagram. Again, this follows systems thinking. There must be a strict logical relationship between the root definition and the conceptual model. Whatever is in the conceptual model is there because it is logically required by the root definition. At the same time, the conceptual model does not go as far as saying how what must be in place might be implemented.
- Stage 5. To ensure the integrity of the process, the conceptual model is compared against the expression of the problem situation in Stage 2. Frequently it will be found that there is a mismatch here. There are two possibilities: It may be that something that is required is not actually in place. Equally however, the process might reveal that the representation in the original rich picture did not accurately reflect reality. In the first case, there is evidence that something in the

problem situation needs to be changed. In the second case, where what is required is in place, changes to the rich picture will be necessary. The approach is iterative in the sense that stages 2-5 are repeated and adjustments made until there is consistency.

Stage 6. Even though consistency may be 'established' it is highly likely that this process will indeed reveal that something is required which is not actually in place. This enables proposals for change to be made at Stage 6.

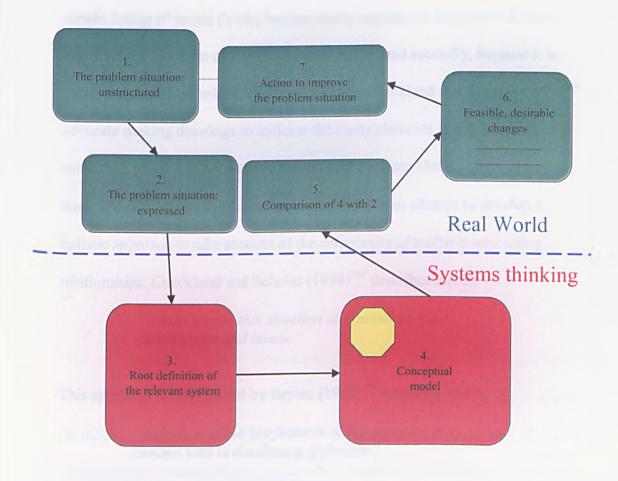
Stage 7. Implementing changes proposed at Stage 6 completes the model.

Checkland's (1999)²⁸⁵ methodology is summarised in Figure 5.

In terms of this study the emphasis is on developing a theoretical model which can be successfully transferred into the real world so the emphasis will be placed upon stages 2 – 4 where progress is best made by thinking things through logically and rationally: if this is required then that must be in place. In Stages 1,5,6 & 7 progress can only be made by recognising the political nature of the process and the diversity of values of the key players, within the real world environment.

²⁸⁵ Checkland, P. (1999) Systems Thinking, Systems Practice. Chichester: John Wiley and Sons, Ltd. P.163

Figure 5. Checkland's methodology outline in summary.



Using Soft Systems Methodology for the PSNI

I will now discuss the relevant stages in respect of developing my model of costs and benefits of training within the PSNI.

Rich Picture (Stage 2)

The process of producing an expression of the problem situation requires patience and the creativity to systematically explore as many aspects of the problem situation as possible. It is because of this that the product is known as a

'Rich Picture'. Diagrammatic representation has been found to be better than a simple listing of words firstly, because many aspects can be conveyed more effectively in the form of drawings and sketches, and secondly, because it is much easier to show relationships in this way. Checkland and Scholes (1999)²⁸⁶ advocate making drawings to indicate the many elements in any situation. It is something which has been characterised Soft Systems Methodology from the start. The rich picture for this research therefore is an attempt to develop a holistic approach to take account of the complexity of multiple interacting relationships. Checkland and Scholes (1999)²⁸⁷ describes this as: -

> "...how we see this situation at present, its main stakeholders and issues."

This approach is emphasised by Bryant (1989)²⁸⁸ who says that: -

"Selection of the key features of the situation is a crucial skill in developing a picture."

From the large amount of information developed as a result of the data analysis in Chapter Five, I found it exceptionally useful to turn this excellent but overwhelming information into picture form. I produced a detailed rich picture for the PSNI / RUC in the context of this research which is set out as Figure 6. It includes the issues and processes identified in the data collection and presents it in a format which conceptualises the work. This provides what Checkland

²⁸⁸ Bryant, J. (1989) Problem Management. Chichester: J. Wiley. P.260.

²⁸⁶ Soft Systems Methodology in Action. Op. Cit. P.A16

²⁸⁷ Op. Cit. P.A16.

(1999)²⁸⁹ describes as a "formal framework for finding out in Soft Systems Methodology." The rich picture captures the worldviews of members of the PSNI / RUC in respect to my area of study. My rich picture contains a higher level which impacts upon police training in Northern Ireland, but which is not considered within the main picture area, this higher level is placed above the dotted line in Figure 6. Within the rich picture itself, barriers to proper links are highlighted by a red X. The existence of a process is signified by a solid speech bubble. Wishes or expectations which are not currently in place are signified by thought bubbles.

The development of the rich picture was for me the starting point for analysis towards relevant systems that might be usefully modelled through the exploration of the problem situation being addressed. Of course, the development of a model in Soft Systems Methodology is different from that in areas such as science and technology.

As alluded to earlier in this chapter, in Soft Systems Methodology the model does not purport to be a representation in the real situation, however, there are accounts of concepts based upon declared world views which are used to stimulate cogent questions in a debate about the real situation and the desirable change to it. At this stage the thinking was not of a model of ... anything, but a

²⁸⁹ Systems Thinking, Systems Practice. Op. Cit. P.A19

model relevant to the debates, the debates from within the police service in Northern Ireland.

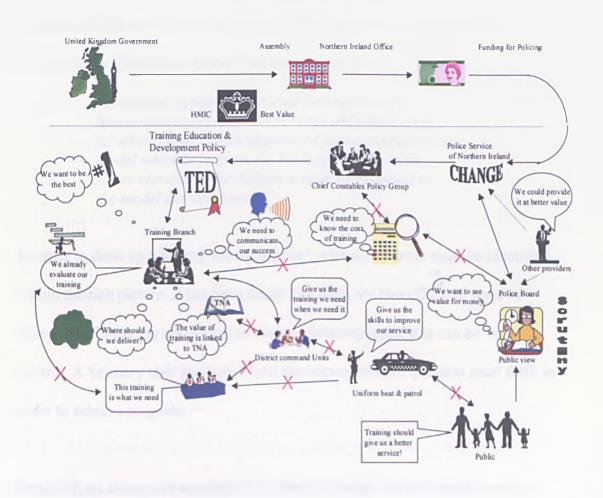


Figure 6. Rich Picture for PSNI

This differs from the scientific world where the model would be a 'valid' representation and be generated from existing real data. The difference for me is that Soft Systems does not only map existing structures, but forces one's thinking out of the normal grooves.

Relevant Systems and Root Definitions (Stage 3)

In order to build a model as complex and purposeful as the costs and benefits of training using Soft Systems Methodology it was necessary to develop a clear definition of the activity to be modelled. These definitional statements are referred to by Checkland (1999)²⁹⁰ as a root definition: -

"A concise, tightly constructed description of a human activity system which states what the system is; what it does is then elaborated into a conceptual model which is built on the basis of the definition. Every element in the definition must be reflected in the model derived from it."

In order to draw up a formal 'root definition', relevant systems must be identified within the rich picture. It has been found that there are two effective ways of doing this. Firstly, by attempting to identity 'primary tasks; this can be very fruitful. A 'primary task' is a task which the organisation in question must fulfil in order to achieve its goals.

Secondly, an alternative approach is to identity 'issues'-in other words, matters which are regarded as important and contentious. These two categories issues and primary tasks, are not exclusive, indeed a matter expressed as an 'issue' in a particular situation might equally be expressed as a 'primary task'. It is simply a matter of convenience, primary tasks and issues are simply a means to an end: delineating a matter to take further. Having identified a matter to work on in this

²⁹⁰ Ibid. P.317

way, it must be defined as a system This is first done informally, as a 'relevant system', very commonly in a form of words starting with the words 'A system to...' This informal definition is then converted into a formal form which recognises the importance of six crucial characteristics which are represented by the mnemonic 'CATWOE'. These letters stand for: -

- C The Customers, in other words, the beneficiaries (most frequently, but not exclusively, in a positive sense) of the successful operation of the system.
- A The Actors, in other words, those people who are actually involved in the situation.
- The Transformation, in other words, the change the system aims to bring about.
- W The World View (the assumptions and values) on which the system is based.
- O The Owner(s) of the system, perhaps most easily identified through asking 'Who can stop it happening?'
- E The Environmental constraints. The factors, especially those involving resources which contain options.

The root definition will recognise these factors, at least implicitly. It was a matter of providing the definition in respect of the costs and benefits of training from the police context identified in my results. For my research, the root definition is therefore:-

'A system which establishes a process aligned with the RUC Training Education and Development Strategy for Training Branch to identify the costs and benefits of training in order that BCU commanders can make informed decisions on training interventions and Training Branch can provide best value training.'

It was therefore also necessary for me to develop based upon the Checkland CATWOE letters a formal definition for costs and benefits of training within the PSNI. The CATWOE for my research is:-

- C Base Command Unit (BCU) Commanders as customers of Training Branch.
- A Training Branch.
- T Introduce a process of identifying the cost and benefit of training in order to make the best contribution to organisational success.
- W The system must operate within the developing Training Education and Development Strategy.

- O The Police Service of Northern Ireland as they oversee Training Branch.
- E The main environmental constraints are the current evaluation processes, lack of a costing model and the change process.

Of course, there are other influences identified from the rich picture that are not contained within the root definition or CATWOE, however, these influences were viewed to lie outside of the internal system. In particular, the views of the public and the Police Board for Northern Ireland will be addressed at stage 6, when the applicability of the system within the real world is being considered.

Conceptual Model (Stage 4)

What needs to be in place to meet the requirements of a Root definition is known as a 'conceptual model.' It is beneficial to use systems models because the focus is on coping with the complexity within the real world environment, and especially because the complexity is in part due to interacting and overlapping relationships. Given the preliminary thinking expressed in the root definition, assembling the model is a matter of developing the activities required to obtain the input to T, transform it and dispose of the output, ensuring that activities required by the other elements in CATWOE are also covered; and then link the

activities according to whether or not they are dependent upon other activities.

See Figure 7 which shows the process of modelling in SSM, Checkland and Scholes (1999)²⁹¹. This model is an account of concepts of purposeful activity, based upon declared worldviews, in this case, the worldviews of the PSNI / RUC.

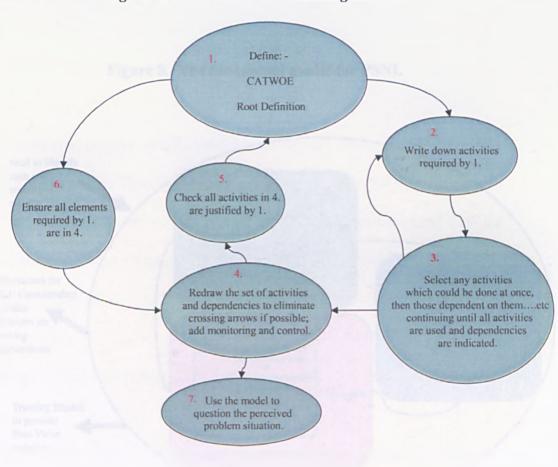


Figure 7. The Process of Modelling in SSM

²⁹¹ Soft Systems in Action. Op. Cit. PA29.

It was clear to me that there was a need to follow a logical procedure to build an activity model for costs and benefits of training within the police environment in Northern Ireland, this is as Checkland (1999a)²⁹² refers to as "use them to make sense of complex situations." My conceptual model for costs and benefits of training within the PSNI is produced as Figure 8. It contains three sub-systems which I have named as the Awareness System, the Operational System and the Monitor and Control System.

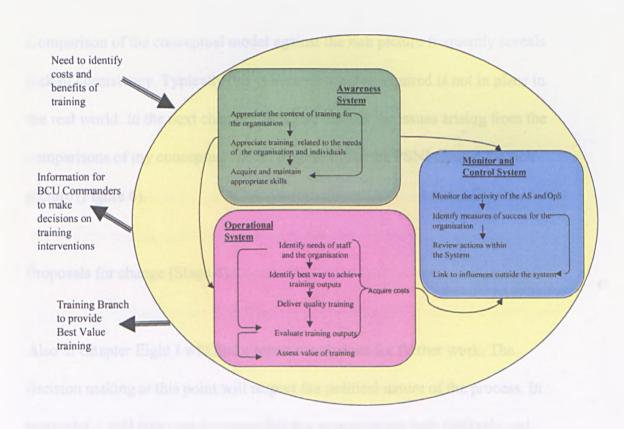


Figure 8. The conceptual model for PSNI.

²⁹² Op. Cit. pA29.

The Awareness System contains the awareness to be gained before the Operational System can be used. The Operational System will use the available knowledge gained through the Awareness System to fulfil the requirements of the Root Definition. Finally, in order to ensure that the model works, it is necessary for the system to monitor and control the operations. In Chapter Seven I will elaborate on this conceptual model, taking full account of the data analysis and the literature.

Comparison (Stage 5)

Comparison of the conceptual model against the rich picture frequently reveals lack of consistency. Typically this is because what is required is not in place in the real world. In the next chapter I will also discuss the issues arising from the comparisons of my conceptual model (Figure 8) for the PSNI against the rich picture (Figure 6).

Proposals for change (Stage 6)

Also in Chapter Eight I will make recommendations for further work. The decision making at this point will respect the political nature of the process. In particular, I will take care to ensure that my proposals are both desirable and culturally feasible.

In the full process the next stage would be implementation. In this research the recommendations will be made to the Training Branch within the PSNI and they will take ownership of the model and the subsequent implementation.

It should be remembered that implementation will change the problem situation, which in turn, will require revision of the rich picture. This in turn, may alter the relevant systems to be attended to and the process can thus proceed in a cyclic manner developing on continuous improvement.

Comments

In this chapter I have reflected on the experience of the research process. This gave me an opportunity to examine the issues which I have encountered and allowed me to deal with these in an open way. The learning from this has been immense and I believe, allowed me to proceed in a more constructive way. In the second part of this chapter, Soft Systems Methodology was used as a specialised form of 'action research.' I saw this as a suitable way to fulfil the need for systematically building a model for the costs and benefits of training within the PSNI. I decided on the use of Soft Systems Methodology as it took account of the results of the data analysis and the literature review. In Chapter Seven I will provide a narrative for implementing the model within the PSNI.

CHAPTER SEVEN

IMPLEMENTING THE MODEL

In Chapter Six I reflected upon my experiences with regard to the research process. I then developed a conceptual model for the costs and benefits of training within the PSNI, which is grounded in the data generated by the research and the information from the literature review. In this chapter I will draw out the detail of the conceptual model and compare it with the real world situation. This will allow me to meet the aims of this study as discussed in Chapter One:-

- 1. To examine existing systems and processes into the costs and benefits of training (reviewed in Chapter Two).
- To carry out research using various methodological approaches
 (described in Chapter Three and Four) to identify the needs of the
 organisation in respect of the costs and benefits of training (reported in Chapter Five).
- 3. To develop a logical model for identifying the costs and benefits of training within the PSNI (developed in Chapter Six and reported in this chapter).

In this chapter I will develop the themes of three main systems, i.e. Awareness System, Operational System, and Monitor and Control System and provide a commentary on these. It should be noted that the themes within the sub-systems are not independent of each other but form part of an interdependent system. Similarly, there is interdependence between the three sub-systems within the whole system. I will show how these relationships exist as the model is built up. All of the dependencies need to be considered in order to identify the costs and benefits of training.

The model itself is designed within the environment shown in the Rich Picture Figure 6 earlier. This context identifies that: -

- 1. There is a need to identify the costs and benefits of training within the PSNI;
- 2. That the model will produce information for District Command Unit

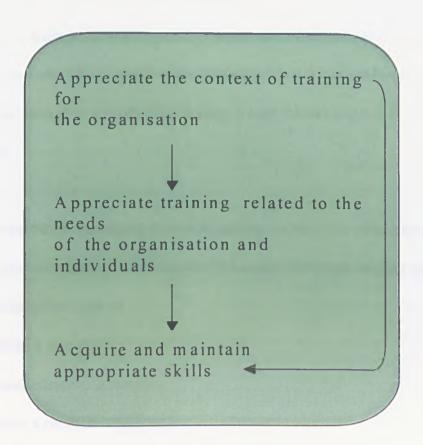
 Commanders to make decisions on the training interventions that are

 available to them; and
- 3. It will allow PSNI Training Branch to provide Best Value training.

Awareness System

Figure 8 previously showed how the three sub-systems make up the system and interact with each other. The Awareness System (Figure 9) contains the awareness that shall have to be gained before the Operational System can be used.

Figure 9. The Awareness System



Each of the sub-systems will be considered in detail.

Appreciate the context of training for the organisation

There is an imperative upon Training Branch to get training correct. The research indicated that too often training was dictated without reference to needs and there is not sufficient flexibility to allow for changing circumstances. Wang (2001)²⁹³ compares the development process to evolutionary genetics: mutations happen all the time (training), but the only ones that are likely to affect the future of the

²⁹³ Wang, G. (2001) Measuring ROI for HRD Programs: Theories, Practices and Trends. USA: ASTD Yearbook 2001.

species (performance of a key role) are those that have a positive impact on interactions with the environment (organisation). The problem in our training set-up is that it is designed with regard to a static, abstract, idealised and theoretical environment and fails to perceive the mismatch when it inevitably occurs. Then there is an attempt to remedy it by looking at how the training was designed or delivered.

A large number of comments were made during the study on what steps Training Branch must consider if it is to improve the context in which training takes place, these included the need to:

- Reduce its arrogance;
- Become customer focused;
- Become a centre of excellence;
- Be properly resourced in terms of people, buildings, equipment and materials;
- Use appropriate training methods;
- Provide a clear prospectus with information on courses, training and development opportunities;
- Provide information on availability of the interventions it runs and the costs of such interventions;
- Provide information on the outcomes that can be expected from the interventions;
- Have a flexible training strategy to support the organisational goals;

- Be able to adapt quickly to provide just in time training for the new skills in a new policing era and a different policing context;
- Clearly identify the organisational need to be addressed by the training;
- Gain agreement with the client on the expected outcomes of the training;
- Design pragmatic training programmes in which the outcomes are measured;
- Collect feedback and improve the programmes;
- Provide a systematic approach to identifying the costs and benefits of training.

The appreciation of the context of these themes will be supported by the 'how-to' aspects within the Operational System.

As one interviewee said, "training must not be seen as merely bums on seats."

Training must be seen as something worth attending and from an operational commander's viewpoint, worth giving up valuable resources to obtain. It must have identifiable outcomes which support both the individual and organisational needs in the workplace. It is only when this becomes the case, that staff will be available for training. Criteria must form the basis of a strategic vision for training, rather than the knee-jerk reactions that have tended to lead training in the past. The Training Education and Development (TED) Primary Reference Document²⁹⁴ does set out a new vision for training and a strategic framework.

²⁹⁴ The Training Education and Development Primary Reference Document. Unpublished RUC Report. January 2001.

There may however, be issues arising as to whether the strategy can be developed into outcomes and can deliver what it has promised. Once the training context is understood by the organisation, it can be delivered through the operational system (see page 289).

Appreciate training related to the needs of the organisation and individuals

Having ensured that the context of training has been considered there is a

requirement to appreciate that training has to be based upon the needs of the

organisation and individuals. Identifying such needs has not been a clear

requirement of training courses delivered by the Training Branch in the past, as a

respondent stated, "We don't design our courses with proper TNA."

Harrison (1988)²⁹⁵ states:

"A lot of training organisations have followed the premise of find out what they (staff) want, give to them and be seen to give it to them."

This has resulted in trainers taking the easy option and focusing on individual needs. Often the assessment of individual needs, was made by the individual or their line manager by reference to a menu of available courses during appraisals or feedback interviews. Such superficial methods satisfied the individuals who wanted training and the line manager who felt they were developing the individual by recommending training. The lack of proper needs analysis at

²⁹⁵ Harrison, R. (1988). *Training and Development*. London: Institute of Personnel Management. P.271.

organisational level often led to inappropriate training for the individual officer and waste of a valuable resource.

Levels of Analysis

The Home Office Circular 105/1991²⁹⁶ stated that training needs identified at merely an individual level would not be sufficient to form the basis of a training package. As Peter Bramley (1990) states suitable models of training should be identified to ensure organisational change combined with learning rather than the more traditional approach of training the individual. McGehee and Thayer (1961) as cited in Bramley (1990) ²⁹⁷ argue that Training Needs Analysis requires much more than armchair celebration and suggest that there should be three levels of analysis: -

Organisation - Corporate objectives.

Job - What is being done, or must be done, operationally to achieve corporate objectives?

Person - What skills are required to achieve operationally those objectives which are in line with corporate objectives?

By looking at the difference between what is and what ought to be at the operational level, it is possible to determine whether there is a need to close the

²⁹⁶ Home Office Circular 105/1991, *The Evaluation of Training in the Police Service*. London: HMSO.

²⁹⁷ Bramley, P. (1990). Evaluating Trainer Effectiveness. Maidenhead: McGraw-Hill.

performance gap. This may focus on current performance or future performance dependant on objectives. By looking at the 'skilled performance' processes at operational level, it is possible to assess where in each process there is a need to address skills and knowledge or whether we need to address other needs.

Needs Analysis

It is appropriate to highlight at this stage that a more appropriate approach may be 'Needs Analysis' or 'Performance Analysis' rather than 'Training Needs Analysis' since organisational needs are not always directly about training, but training is frequently perceived as the most appropriate way of meeting the need. Based upon the results of the research, I will use the term Needs Analysis in this paper. What is needed is removal of the assumption that somebody has to be 'taught' something and therefore they won't know it until they have been taught it. Instead there is a need to adopt the reality that they have to do something to a certain standard, and in some cases they may already know how to do some, most or all of it without being trained. It may be that as a result of assessing their current skills and knowledge as measured against the new descriptor, training is not the most ideal or cost-effective solution. It may simply be mentoring, coaching or letting them find out for themselves.

It is therefore necessary to identify the needs at the outset of the process, it should be effective and timely. As a respondent said "...it is important to understand that each has different needs, so you need to begin by identifying the

skills-deficit and develop those skills to ensure they can fully function and are better equipped for the job." The idea of identifying needs at an early stage could be unsettling for both parts of the organisation. It may indicate that much of the course-based approach to training that is encouraged by Training Branch and loved by supervisors may not be the best option. Such a culture change will require all staff getting to know the organisation, re-educating managers about what training and development are about and what they are meant to achieve in terms of performance improvement. However, as an organisation it is not correct to expect supervisors to carry out this function effectively without providing them with the necessary skills and support to identify individual needs and give them the information to understand what the organisational needs are.

Cultural Change

In addition to the above within the organisational culture of the police service in Northern Ireland, there may be several factors which would prevent any Needs Analysis being fully successful.

- Managers who currently act to identify needs during appraisals and feedback interviews may feel threatened with the loss of their traditional role of unilaterally nominating officers for courses.
- 2. Analysis may not be acceptable to key decision-makers as it may require an acceptance of a different culture to those which are currently strong within the force.
- 3. Organisational systems themselves will often act as blocks to change.

The latter is probably the main obstruction to effective needs analysis. This may take the form of the culture within the workplace not being ready for change.

This is very relevant within the PSNI and it reflects the importance of encouraging, recognising and rewarding new approaches in the workplace and not just relying on training structures. Proposals made in the form of future activity may be difficult to calculate. Such lack of measurement may prevent progress or acceptance.

The high cost of poorly identified training is set out in the arguments of Davies (1971) as cited by Buckley and Caple (1992)²⁹⁸: -

- More training being organised than is really necessary.
- Courses and training programmes are longer than they need be.
- More tutors and equipment are employed than the job demands.
- Students who may be perfectly competent in performing the actual job may fail in training because it is too theoretical rather than practical in its nature.
- Irrelevant criteria may be used to select students for training resulting in potentially suitable students being excluded from the programme.
- Job dissatisfaction can result from the worker being prepared for a higher calibre job than the one being done.

²⁹⁸ Buckley, R and Caple, J. (1992), *The Theory and Practice of Training (2nd Ed)* London: Kogan Page. P.5.

These issues are well reflected in the results from this study and lead managers to the conclusion that much of the training provided is not meeting the needs of the organisation or the individual. A respondent stated, "They are still not identifying the training needs...and therefore they cannot identify the training solutions."

The police service is unique in many ways, not least in the imperative to meet minimum legal requirements and also satisfy social demands. A good example of these are the requirements of the Human Rights Act 1998 or the Equality requirements placed upon a Public Authority as prescribed by the Northern Ireland Act 1998. This means that a system of prioritisation must be used to ensure that the most important needs are being met first and by the most appropriate means. Understanding the importance of identifying needs will ensure training is targeted and focused.

Acquire and maintain appropriate skills

Within the Awareness System there is a link between this sub-system (acquire and maintain appropriate skills) and the two other sub-systems (appreciate the context of training for the organisation and appreciate training related to the needs of the organisation and individuals). As I shall discuss, the wrong organisational context or poor Needs Analysis may affect the skills available for training.

Correct Staff

It is vital if training is to be successful that the staff who are employed as trainers, designers and evaluators are the right people. They must be committed to continuous improvement for individuals and the organisation. As a respondent said, "Get the right people for jobs within training who want to be there, who have the right qualifications and are given support and guidance." Training and support roles must not be seen as merely a way of getting away from operational duties, but as a high profile post which is a key to the success of the organisation. The research states that all too often, training staff consider themselves to be unimportant and not valued by the organisation. There is also a need for the PSNI to accept that training on police topics can be designed, delivered and evaluated by skilled non-police trainers. Police and civilian trainers will have to work together to deliver a quality product that provides the necessary context and outputs.

Necessary Skills

Staff must have the necessary skills not only to deliver quality training interventions, but to understand and be able to identify needs, develop training curricula and measure the success of their work. A respondent stated, "I think as a Force we have very skilled trainers, but, I think they need supported in order that they can do a better job and meet the needs of the organisation and the individual."

In the past only scant regard has been given to ensuring that trainers have all the necessary knowledge and skills and such knowledge has often been assumed. It is only when they begin to realise the full extent of the skills they require will they deliver the level and focus of training required. Training Branch must make available the necessary processes and resources to ensure that the skills exist, are maintained and developed to take account of the changing world of training.

TED does place an emphasis on these skills within Training Branch, however, despite these good intentions efforts must be made to ensure that the organisational pressures do not drive us back to the mistakes of the past and leave staff without the necessary skills. Only properly qualified trainers who are constantly achieving high standards should be employed in delivering training. Those conducting needs analysis and evaluations must have the necessary skills to carry out these functions or the system will fail.

Operational System

The Operational System uses the available knowledge gained through the Awareness System to fulfil the requirements of the Root Definition as discussed in Chapter Six. The operational system is by far the largest and most critical aspect of the model. We can see how the sub-systems interact within the system in Figure 10.

Each of the sub-systems will be considered in detail.

Figure 10. The Operational System.



Identify the needs of staff and organisation

In the awareness system I examined how there needed to be an appreciation of training related to the needs of the organisation and the individual. Within the operational system I will examine the activity of needs analysis for staff and the

organisation. The operation of needs analysis is critical to the success of the model.

Identify the Customers

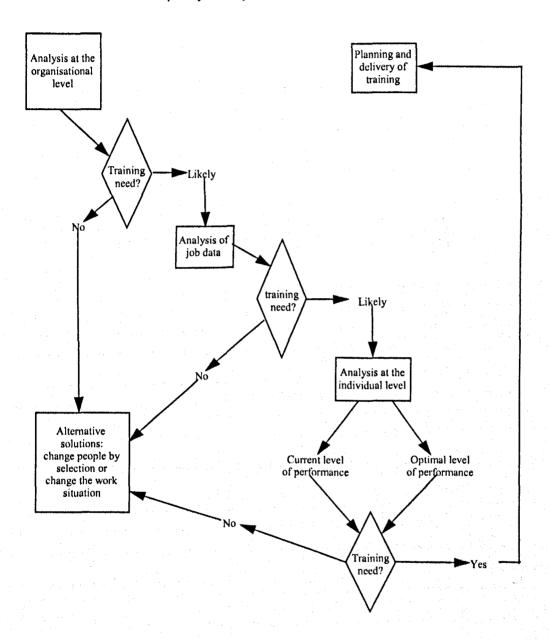
Buckley and Caple (1992)²⁹⁹ advocate that the assessment of training needs should be considered from the top of the organisation downwards rather than being a mainly individually orientated bottom - upwards process. They argue that the training should not be for the individual in the hope it will benefit the organisation, but for the organisation and this will benefit the individuals. It is clear that within this research the key figures interviewed in the background interviews stated the need for such a macro perspective, thereby accepting training as an integral part of the organisation system.

The results of the questionnaires and interviews indicate that the respondents thought the trainee should be every bit as much the "customer" for training and development as the organisation. Training is not only about the organisation viewing it as valuable, but trainees viewing it as valuable to them in the circumstances they face. The organisation, which still foots the bill, is looking for connections between the training and those effects on the job that have operational and financial value. I believe that the integration of three levels of analysis can be successfully completed by:- 1) examining the performance of the organisation, 2) developing these to the operational posts, and finally, 3) making

²⁹⁹ Ibid.

an analysis of those within the posts to discover if training will close the training gap (see Figure 11)³⁰⁰.

Figure 11 Training assessment model
Adapted by Bramley from Vintor, Clark and Seybolt, 1983



The needs analysis can therefore be identified through the contributions of: -

³⁰⁰ Op. Cit. P.92.

- Experts.
- Job holders.
- Supervisors.
- Customers.

With regard to customers, the needs of the community are particularly important to the modern police service and interactions with Non-Governmental Organisations and statutory agencies can provide the necessary information.

Conducting Needs Analysis

I now will consider how to carry out Needs Analysis to meet the research findings; Rummler (1987)³⁰¹ sets out the main factors which may affect such research.

- Time to complete either time given to do research, cost restricting time and time pressure for results.
- Resources to do research, impact of cost, getting full information and sufficient skilled researchers.
- Management want training activity and not training results.
- Management do not want detailed checking of operations but a superficial look for alleged needs.

³⁰¹ Rummler G. A. (1987) *Improving Performance*. San Diego: Jossey-Bass Management Series. P.27

The PSNI does not carry out proper Needs Analysis. When Needs Analysis is conducted little time or resources is given to this type of research. Senior managers want to direct the issues to be trained so that the training can be conducted as quickly as possible. An interviewee said, "We don't design courses with proper TNA..."

It is possible to make use of a procedure such as EFQM (European Foundation of Quality Management) to ensure that the process of needs analysis is completed as a matter of good practice within the organisation.

There are many sources from which a performance development need might arise within PSNI, these have been identified as:-

- Ongoing commitments particularly within the areas of recruitment,
 promotion and continuing professional development.
- Performance decline e.g., complaints, performance indicators.
- Change in the nature of the business New technology, changes in legislation.
- To resolve long or short-term problems.
- To protect the Organisation from financial or legal damage, or to meet Social/Political requirements.

There is a need for Training Branch to focus on the business needs. Although the concept of the Balanced Scorecard discussed in Chapter Two and recommended

by the TED Primary Reference Document may help provide this, there are concerns about its overall usefulness in the public sector and in particular, in helping identify the organisational needs for the PSNI. A simpler and just as an effective way is for the focus to be placed upon three questions adapted from Tobin (1998)³⁰²: -

- What are the goals of the PSNI?
- What needs to change in the PSNI to meet those goals?
- What training or development needs to take place to achieve these changes?

The answer to the first question should be available through such things as the strategic plans and goals for the PSNI. The answer to the second question should be available from all officers who have responsibility for the organisational goals and who have the critical visions of success. The final question is the skill that Training Branch will have to develop in transforming the needs into design of training or other developmental approaches.

Clarifying Responsibilities

The Home Office guidance set out in Circular 105/1991³⁰³ reintroduced the concept of the Client/Contractor relationship first quoted in Circular 114/83³⁰⁴. The 1991 circular states that if objectives are to be properly set by the training department (the contractor), the needs which the course is designed to meet must first be identified by the force personnel department (the client). It is my view

³⁰² Tobin, D. R. (1998) The Fallacy of Return On Investment Calculations. @ www.tobincls.com Home Office Circular 105/1991, The Evaluation of Training in the Police Service. London: HMSO.

³⁰⁴ Home Office Circular 114/1983, Manpower, Effectiveness and Efficiency in the Police Service. London: HMSO.

that to ensure we move towards meeting the Home Office guidelines, there must be an acceptance of responsibility by both Personnel Branch and the Training Branch. Personnel Branch has access to both organisational and individual needs. As part of its business planning, it should be ensuring that the organisation is developing or acquiring the human skills it needs to achieve its objectives/goals. This appears to naturally form part of the career development function.

I would argue that information already exists as: Force Goals; policy decisions; Policing Priorities; local aims and objectives; new police occupational standards; legislative ethical standards; resource planning and forecasting; Job and Training Needs Analysis research results on all ranks from constable to superintendent; results of the 'Objective Structured Performance Related Examination' (OSPRE); results of assessment centres; staff performance reviews and job descriptions for specialised posts. It is apparent that this information requires to be collated and disseminated to the Training Branch for development into objectives.

Of course currently some of this information is made available to Training

Branch but it is restricted in scope and often is not used. As a respondent stated,

"...currently within the PDR System the papers go to Headquarters and don't

come down." A new performance review system is being researched and must be

used to identify needs for the future. This new review system should be linked to

the Competency framework developed by the Association of Chief Police

Officers (ACPO) to encourage meaningful action planning. Another rich source of information is available from the failures and mistakes that the service makes, this information is readily available from the Legal Adviser.

I agree with the sentiments of Buckley and Caple (1992)³⁰⁵ that training staff must be able to provide in-house consultancy, becoming involved in investigating different organisational problems and using their skills outside of the training environment. Such a development of their relationship with the organisation at all levels will ensure a meaningful role for training staff and a correct link within the system. Proper identification of needs and development of training objectives ensures it is possible to measure the quality of a training course and the effectiveness of the training function. Once the objectives for a training course or event have been set, it should be possible to see clearly how they are related to the force's overall short, medium and long-term goals and strategies.

How to Identify the Needs

The needs analysis will form the basis of any future training programme and should identify: -

- who must be trained;
- what must be trained;
- when this training should occur.

³⁰⁵ The Theory and Practice of Training. Op. Cit.

This will result in Training Branch identifying what needs to be learned, how it will be learned and when it will be learned. Additionally, there needs to be a further focus on how the learning will be measured and what indicators will be used. It is the latter that traditionally we have not been able to achieve either through lack of skills or because it is seen as too difficult. Training Branch must look at how the learning will be applied to the job and how this will link back to the business goals. This will require a further development as Training Branch will need to work with the management of the PSNI for the application of the learning to the job and the reinforcement of the learning once the staff member returns to the place of work. After all, if the learning is intended to provide the means to achieve the business objectives, then it is in the interest of the management of the force to ensure that it happens and our outcomes are achieved.

An interviewee stated, "There is a need to estimate the worth to you and the operation of your DCU to have an effectively trained person." As recommended by Pollack (1992)³⁰⁶ a proper process of identifying needs means that the aims and objectives set for training interventions can be linked to the outcomes needed, this provides the means by which evaluation measures can be developed at the time of needs analysis. If Training Branch develop the measures of success

³⁰⁶ Pollack J. (1992), Do you agree? The Evaluation of Training or The Quest for the Holy Grail. Training and Development. October 1992.

at the needs stage then the link to the needs of the organisation should be explicit and the evaluation will test if the delivery has been achieved.

The effectiveness of the PSNI as an organisation is a function of the strategy, structure, its processes and its culture. It is therefore a holistic concept. It is possible to train our staff in respect of processes and how to change them, but whether they are allowed to change them is another matter. The extent to which an organisation can change its processes and the speed with which it can do so is one indicator of 'organisational effectiveness.' So there is a relevance to the costs and benefits of training, in how effective the organisation already is.

Learning organisations, by definition, should be highly effective organisations if the term is to mean anything. The change now being proposed under the Patten Report, is the ideal opportunity to develop such an organisation.

Identify best way to achieve training outputs

As the results in Chapter Five have indicated there are a number of needs to be identified, the organisational needs, the department or district commands needs and the individuals needs. Each of these has differing objectives, so, in order to determine whether or not the training activity is going to meet them, they have to be taken into account when preparing for a training event. An example from the interviews was training to manage sickness absence, where the training was trying to meet the needs of the PSNI as an organisation, local command needs and individual skill needs. An efficient training design is vital. Two core

processes reinforce each other here: defining the training objectives on which the learning activities will be based and setting criteria by which the activities can be evaluated.

Focusing on Outputs

An output focused approach was advocated by Newby (1992)³⁰⁷. Newby states that good design places the premium upon behavioural change rather than an awareness objectives and therefore the end product can be clearly specified training objectives with observable outcomes. This design has obvious economy of effort when design of objectives and design of evaluation measures proceed hand-in-hand. As such it is less costly of design time and yields more fruitful information to build evaluation into training design from the beginning, rather than add it on as an afterthought.

Oh

Traditionally, training professionals within our organisation have not been involved in looking at operational and strategic measures of performance. Also, supervisors have been quite happy to attend courses without having to worry about committing themselves to improving their own performance. Generic training might get terrific scores for Level 1 (trainee satisfaction), Level 2 (learning), Level 3 (on-the-job application) based upon Kirkpatrick's model, but has not had any positive business results. In fact, current generic training as my research suggests is more about 'bums on seats', with a low cost per head, than

³⁰⁷ Newby A. C. (1992), Training Evaluation Handbook. Aldershot: Gower. P.33.

in learning or organisational effectiveness. As a respondent stated, "Too often we are simply filling courses to suit Training Branch."

Trainers can provide excellent training in all the ways training is usually assessed, but students only learn what they need to deal with current and/or frequently encountered situations that they 'see' in their working environments. Other materials, skills and/or knowledge trainers present may be interesting. entertaining or have a curiosity value, but trainees may not have an opportunity to apply them. Skills and knowledge are what counts, sticks, and should get applied. Everything else is subject to being ignored and highly likely to fade quickly from memory. As a respondent stated, "...training I see as developing the skills that are identified for that job. The training is to fill that skill gap." The PSNI must see training as being one (and only one) way for people and teams to gain the skills and knowledge they need to be effective in their jobs. And this is at all levels of an organisation from entry level (that is entry level to the role or a particular rank, not just entry level into the organisation) to the top of the organisation.

By doing this analysis the organisation is no longer merely concentrating on the quality of the input but on the output and outcomes. It is, after all, the output that achieves any individual or job-related goals and objectives, and not the input.

Training and development interventions are not the only influences in business success. Other approaches such as secondments, guidance, mentoring,

guesswork, previous experience, watching others, innovation and discovery are also important. It is the case that training cannot be seen in isolation from the other influences in the work place.

Identify the Correct Approaches

In developing training and development solutions it is necessary to consider the capabilities of the individual. It is important to take account not only of the training intervention is intended to achieve, but also if the people are capable of achieving the level or outcomes expected of them. I also believe it is necessary to take into consideration the environment in which the people will have to return to after training and if it is likely to reinforce or oppose the learning. One of the problems identified in this study is that in the PSNI training, very rarely does management understand the need to support training back in the workplace.

There is no reason why training should take complete credit for any organisational improvement. Nothing in an organisation operates effectively in a vacuum. Improvement is, and should be, contributory, cumulative and synergistic.

The Police Service in Northern Ireland must look at identifying and developing the most appropriate training and development solutions. As Reece and Walker (1997)³⁰⁸ state: -

³⁰⁸ Reece, I.. & Walker, S. (1997) *Teaching Training and Learning, a practical guide*. (3rd Ed) England: Business Education Publishers. P.9.

"It does, however, mean that you need to find out the techniques that are most appropriate to the individuals and teach according to the needs and preferences."

The delivery of training needs to be flexible, providing a suitable style and methodology to ensure that the training is successful. In a questionnaire a respondent stated, "We simply need to get a coherent and flexible approach sorted out to the training and make the overriding priority one of providing the best training possible for operational police." Consideration needs to be given to a range of approaches including modular training, E-learning and distance learning. The 'value added' here is the time and cost saved by not having to train someone in everything because they already know it or because there is a far more efficient way of giving them the confidence and competence to do their job without a training 'course.' Further 'added value' might be in the experience someone else could get; a colleague, or new supervisor, in coaching or mentoring the individual. So, rather than run a full workshop to teach someone to 'Communicate effectively with groups', you might need only run a quick coaching session with an on-the-job project, for example, to practise encouraging feedback. If we define what an individual needs to do to be productive in their job, then we have identified a target outcome.

Equally the training must be the correct length to meet the need. Too often, the length of period is dictated by Training Branch before the curriculum design is complete. Students are expected to remain within the training environment

longer than necessary merely to ensure use of a classroom or to engage trainers. A course should be only long enough to deliver the learning outcomes reasonably achievable. The conventions of the past in respect of course timings must be abandoned to allow the most productive use of time and saving on opportunity costs. Where appropriate, this should include delivery of training outside of the normal conventions of 9am-5pm, Monday to Friday.

From the results in Chapter Five the following areas need to be considered by PSNI Training Branch to identify good practice for delivery of training: -

- Identify the most appropriate method of delivery
- Consideration to a wide range of delivery
- Identify the duration of the event
- Identify how many training staff are required
- Prepare lesson plans and materials
- What levels/ranks should attend
- Identify the number of events/courses/sessions required
- Identify where training will be delivered
- The impact of the training on dept/staff/abstractions?

By considering each aspect of the areas listed above, it will be possible for PSNI

Training Branch to develop a range of approaches which can be applied to

training and development situations and so ensure that the outcomes are properly

supported. Failure to take account of the appropriateness reduces the likelihood of success.

Deliver quality training

When I speak of the results of training, I mean results beyond those of simply equipping people with the basic skills and knowledge necessary to carry out their assigned tasks and duties. As an interviewee stated, "Training is about developing something to make a difference..." It is therefore necessary to redefine a training intervention as a solution to some problem beyond merely equipping people to do their jobs. In cases where skill and knowledge deficiencies are leading to mistakes, errors, defects, waste and so on, it can be argued that training which eliminates these deficiencies is a solution to a performance problem. This argument can be extended to assert that the reductions in mistakes, errors, defects and waste, as well as the financial value of any such reductions constitute the "results" of training. The logic of this argument has a certain superficial appeal, but it is far from impeccable and I believe even farther from compelling. This type of training is reactive rather than proactive and the true measure of its value lies in its absence.

The delivery of a quality-training product will enhance the reputation of Training Branch. As stated earlier, there is a need for Training Branch to secure proper training and support for the trainers, without the necessary skills to do the job,

training will continue to be seen as less than effective. The trainers must also be properly selected to ensure that the expense of training them is recovered.

Where Should Training be Delivered?

It is also vital that Training Branch considers where training is to be delivered. It is obvious that many see the centralisation of training at the Garnerville Training Centre to be a barrier to getting students to attend training events. A respondent said, "District Commanders should be able to purchase training, etc., from a variety of sources - co-ordinating with other district commanders to achieve Value For Money/best value." More consideration must be given to ensuring that training can be delivered in suitable facilities close to students' work place. The use of buildings which are conducive to learning is also important if students are to maximise the training experience.

Who Should Deliver Training?

The results recorded in Chapter Five indicated that Training Branch was not necessarily the best placed to deliver certain types of training and that the use of outside providers could have the advantages of meeting identified needs at a better price, more effectively and in a more timely matter. If other providers are considered it may be delivered in closer proximity to the students' place of work and there may be the advantage of outside influences which were seen as positive

in the Report of the Independent Commission on Policing for Northern Ireland³⁰⁹.

There may still be issues with full use of outside providers within the current security climate in Northern Ireland, and some may claim that they do not have the necessary understanding of the police context. However, the initial external collaborations which have been embarked upon will provide good practice for further partnerships. In addition, there is clearly a need for minimum standards in training delivery. External accreditation with National Training Organisations and Universities will provide robustness to the system provided they are lodged in the needs of the organisation. The development of a range of occupational standards which can be accredited under the newly created Police National Training Organisation (Police Standards and Skills Organisation) will help to ensure that training reaches identifiable minimum standards.

Evaluate training outputs

Within the model of the costs and benefits of training, evaluation is a key component within the operational system. There are indications that in the past RUC Trainers often did not worry about testing the effectiveness of their courses as they used attendance as a measure of success. One respondent stated

³⁰⁹ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999) A New Beginning: Policing in Northern Ireland, HMSO, P.26.

"...Forces still haven't got their heads around evaluation of training." However, as discussed earlier the concept of 'bums on seats' does not reflect proper targeted training. Clearly with the vast sums of money being invested in the development of human resources, it is expedient that some ongoing audit or evaluation of the training is carried out, to measure its value to the individual and the organisation alike. It has been obvious from my review of the available literature that the field of evaluation has used a particular taxonomy for writing about and conducting evaluation of training. Most of this work has been conducted in a theoretical way. It is only within recent writings and articles that human resource specialists have begun to take account of evaluations in the real world. I believe that like other organisations the PSNI has not been conducting our evaluations to the proper effect.

A Definition of Evaluation for the PSNI

As stated earlier in this paper, the standard understanding of evaluation is that it is a systematic assessment of worth or merit of some object. In the background interviews, a respondent stated that evaluations should, "Test the effectiveness of training. Impact on the individual and the contribution to the workplace both immediately and over time. It should provide a measurement of the value for money and the cost benefit. If possible we should be able to compare and contrast courses for value and effectiveness."

In terms of the outcomes of my research, I see the following definition of evaluation as appropriate for the PSNI: -

"Evaluation is part of the decision-making process. It involves making judgements about the worth of an activity through systematically and openly collecting and analysing information about it and relating this to explicit objectives, criteria and values" Aspinwall (1992).

And from a Training Branch perspective evaluation should support the view adopted by Hamblin: -

"The purpose of evaluation is control. The control of training is in effect the management of training: the process of collection, analysis, and evaluation of information leading to decision making and action. The purpose of evaluation is to create a feedback loop, or a 'self correcting training system (Rackham, Honey and Colbert 1971). A well controlled training programme is one in which weakness and failures are identified and corrected by negative feedback, and strengths and successes are identified and amplified by means of positive feedback". Hamblin (1974). 311

In this case the main task of the evaluator is to test training effectiveness or to validate the claim that selected training methods have brought about the desired result. However, the Home Office Circular 114/83³¹² made it clear that a period of rapid expansion in police resources had drawn to a close. The emphasis changed to value for money, and the efficient and effective use of resources by managers and focusing demands for training to provide appropriate skills and abilities to do the job. There is also a dilemma facing Training Branch in

312 Manpower, Effectiveness and Efficiency in the Police Service. Op. Cit.

Aspinwall, K., Simkins, T.Wilkinson, J. F. & McAuley, J. (1992), Managing Evaluation in Education. London: Routledge. P.2.

Hamblin, A.C. (1974), Evaluation and Control of Training. London: McGraw Hill, P.11.

achieving the balance between the desire to carry out rigorous evaluations against adequate use of resources. Even within the public sector, organisations spend money on training primarily for business reasons.

It has been stated in the background interviews that the RUC/PSNI evaluate using Kirkpatrick's four level model and they evaluate to level three, which is measuring the performance of trainees and transfer of learning to the workplace. A thorough evaluation will involve research at a number of stages in a programme usually before, during and after. However, it is the reality that the Force Evaluation Unit is traditionally only asked to attempt to evaluate the benefits of the training after the event. The only real purpose of such reviews is to validate the objectives of the course to ensure they have been met. So currently, Training Branch evaluation is as Cronbach (1963)³¹³ stated, to identify aspects of the course where revision is desirable. This form of evaluation is aimed at improving the training and development under investigation, but not necessarily checking if it is the correct training to meet needs.

This approach is supported by Warr, Bird and Rackham (1970)³¹⁴ who state, "the purpose of gathering evaluation data is to provide the trainer with information which will help him increase his subsequent effectiveness." They support the

³¹³ Cronbach (1963), Course Improvement through Evaluation, San Francisco: Jossey-Bass Publishers.

³¹⁴ Warr P., Bird M. and Rackham N. (1970), Evaluation of Management Training, England: Gower.

view that organisations should pay less attention to the longer term effects of training and development and argue that if a training programme is no good in the short term it is not likely to be much good in the longer term.

However, the research results in Chapter Five indicate that in the past the organisational focus on evaluation within the RUC has been too narrow. As a respondent stated, "Most of our evaluations are started after the training has commenced and are intended to check the outcomes against the objectives."

Pollack (1992)³¹⁵ suggests that any evaluation should be asking two key questions, "What are we trying to achieve?" and "what's the best way to go about it?" Pollack states these two questions, "are central to the rationale of evaluation, the purpose of which is to improve the relevance and quality of training and development activities." According to Pollack, the critical stage in the evaluation cycle is the identification of needs, and this has been reinforced by this research. Unless it is clear 'what we are trying to achieve', evaluation will be difficult and subjective. As an interviewee said, "If we build in measures as the training is being designed, we can identify what is best measured to evaluate the success of the course." Obviously, an evaluation of this magnitude requires the commitment of resources, particularly time, as the effects of training and development may not occur for a long time after.

³¹⁵ Do you agree? The Evaluation of Training or The Quest for the Holy Grail. Op. Cit.

The Challenge for Evaluation

Watson (1986)³¹⁶ states that the "most commonly used method of evaluating training is to collect participant reactions to it". Warr, Bird and Rackham (1970)³¹⁷ define reaction evaluation in terms "of the methods involved in gaining and using information about trainees' expressed reactions." Easterby-Smith (1986)³¹⁸ viewed reactions, outcomes and inputs in a similar light, but preferred the term 'input' for his classification and in this way the use of the terms reaction-input-outcomes are inter-linked. However, it is clear that in looking at the costs and benefits, the level of evaluation must move far beyond reaction level 'happy sheets' towards longer term and higher level evaluation. New methods and measures must be developed to help the PSNI to meet the new challenges. The evaluations must be concerned with checking the relevance of the training inputs against individual and organisational needs. Any information that can guide the trainers to further improve a course or programme will potentially be of value to them.

As stated above, for many respondents determining the extent to which training objectives have been achieved is one that is traditionally regarded as evaluation. So it is important to validate the objectives set for the training, however, there is a need for the assessment of achieved outcomes linked back to the needs

³¹⁶ Watson C. (1986) Management Development Through Training. USA. Addison-Wesley. P.274.

Evaluation of Management Training. Op. Cit. P.19.
 Easterby-Smith, M. (1986), Evaluation of Management Education, Training and Development. England: Gower. P.58.

analysis. In other words, what is required is a measure of what students can now do against the original skill gap. A respondent stated, "One way is by post-course evaluation, an assessment or measurement of what a person couldn't do before against what they can do after the training as a result of it."

Whoever identified the need in the first instance is pivotal in evaluating the return to work of the trainee. Has there been a benefit to the trainee and the organisation from the training and can it be measured against the original need? What impact will the development of skills and knowledge have in supporting the Force Goals? Apart from the training evaluation, there will also be a need for an ongoing measurement of the individuals development and continued use of the skills and knowledge through the appraisal / development process, which must feed back into the TED strategy. These levels of evaluation are regarded as complex as so many different factors affect the end result of change in personal performance or improved departmental performance, or increased organisational effectiveness.

It can be argued that the reason it becomes harder to measure the organisational results level of training, is because there are too many variables which influence their outcomes. But, surely there is a need for an organisation to have some understanding of these variables in order to bring about any form of change? The approach used in other areas of organisational change should be equally applied to training, as control of these variables is the only way that it will feed through

to the organisational outcomes. It should therefore be seen that added value is a holistic measure of the organisation. Hamblin (1974)³¹⁹ describes "learning as acquiring the ability to behave in new kinds of ways." Training and development, therefore, can be evaluated by obtaining information about the amount and type of learning which trainees acquire. Warr, Bird and Rackham (1970)³²⁰ describe learning as an immediate outcome in that new knowledge, skills and attitudes have been acquired.

Changes in learning can be measured as soon as a course has been completed. Whether changes are transferred back at the work place may depend on a number of factors including; an action plan, a suitable organisational climate and usually a sympathetic line manager (Bramley 1986)³²¹. Beyond the mere acquisition of knowledge, skills and attitudes lies the problem of the effects on job behaviour as Hamblin and Kirkpatrick describe it, and on intermediate outcomes as Warr, Bird and Rackham (1970) refer to them. Hamblin (1974), Kirkpatrick (1983)³²² and Warr, Bird and Rackham (1970) talk in terms of "ultimate outcomes" which goes beyond the trainee's job behaviour and focuses on changes in organisational effectiveness. It is this that I will discuss under the heading 'Assess the value of training.'

320 Evaluation of Management Training. Op. Cit.

³¹⁹ Evaluation and Control of Training. Op. Cit. P.17.

³²¹ Bramley, P. (1986), Evaluation of Training, A Practical Guide. London: Gwynne Printers Ltd. P.201.

³²² Kirkpatrick, D. (1983), Four Steps to Measuring Training Effectiveness. Personnel Administrator, 28,11.

Getting Started

As a first step in planning an evaluation of training it is necessary to identify the stakeholders for the evaluation. A stakeholder is any person or group who has an interest in the course or programme. It is then a matter of presenting evaluative information within the framework of value held by each individual stakeholder (Easterby-Smith 1986³²³). To evaluate training is to determine its value. Value is relative. What is of great value to one person is of little or no value to another. In evaluating training, then, it is important to know one's audience, the person or persons for whom the determination of value is to be made. As noted earlier, there are often several audiences for evaluation results. These include the trainees, their managers, the trainers and their managers, the executives of the organisation wherein the training is taking place, budget holders, members of the training profession and members of the larger community in which the police is embedded.

It is vital that stakeholders are included in all aspects of the evaluation process as the definition and perception of value varies from person to person, as does the purposes of evaluation. Moreover, the various audiences for evaluation frequently act as their own evaluators. I believe that the results of this research indicate that training is being evaluated every day, by trainees, managers, executives, and the public, in accordance with their criteria and purposes. Their

³²³ Easterby-Smith, M. (1986), Evaluation of Management Education, Training and Development, England: Gower.

value judgement is based upon the view that the training has presented some outcome or value to them in their role and that by doing that role better they are achieving something for the organisation. It is therefore the simple case that there is no "cookbook" approach to the evaluation of training.

One of the major obstacles to top level (impact, business results) evaluation is that training staff are not sufficiently knowledgeable about the business of the organisation and do not understand how to tie into the business indicators that already exist in our organisation. Nor do they understand the real purpose of evaluation, which is to target pre-defined organisational level outcomes and manage toward those outcomes, not to see what happened after the intervention is completed. There is therefore a need for suitable skills in evaluation to be made available to achieve these results.

Achieving Business Results

As stated before almost all training evaluation in the PSNI is reactive and tactical, rather than proactive and strategic. One approach to overcome this is the use of "causal chains" between bottom-line Business Results and training using the Organisational Effectiveness Indicators which are already available. The mistake that has been made in the past is trying to go directly from a training intervention to bottom-line results. If there is a need to demonstrate the effectiveness of training programmes we have to tie them to specific business goals. Any investment in learning must be appropriate to the level, speed and

intensity of the change in performance required. The planned training should be developed in a way that actually fits in with the achievement of an organisational goal. The identification of the costs and especially the benefits is about examining the overall effort and achievement in bringing about change. This is especially pertinent at a time when the PSNI is undergoing fundamental change. If training is to be valued by the leaders in the police service, then the training effort must start and end with a focus on the organisational goals. A respondent stated, "There is a need to concentrate on the relevant elements that build up to the goals and objectives of the organisation." This will help in prioritising the spending on training and remove what can be described as 'feel good' training. which Training Branch have delivered, it is easy to deliver, and people enjoy it. However, on close examination, it will get good results only on the first three levels of Kirkpatrick's model but it may not achieve anything towards the organisational benefits of level four.

If the framework is linked to the needs analysis then it should be easy to see that the improved skills and knowledge will make a difference. This is what Kearns (1996)³²⁴ describes as the bottom-line backward approach. He states that the traditional four level approach of Kirkpatrick does not allow a simple means of identifying the benefits of training. He starts from the premise that managers need to ask two questions: -

³²⁴ Kearns P. (1996) Evaluation- from the bottom-line backwards? Croner Training and Development Briefing, September 1996.

- Have you got individual performance measures for the trainees? If not, what reason do you have for trying to train them?
- How much value is the training likely to generate?

By doing this, managers will have a baseline to work from. This can be developed by adding an extra step, level 0, into Kirkpatrick's model.

Level 0 — have performance benefits been identified? (based on individual and organisational needs)

Level 1 — how did they react to the training?

Level 2 — did they learn anything?

Level 3 – are they using what they learned back at work?

Level 4 — did the training improve the bottom line?

Kearns states that this small but fundamental alteration means that baseline information is collected for all training, before training starts. It therefore provides the data for real evaluation to take place. In Kearns (2000)³²⁵ he states that this change sets out a much more demanding standard in training. Without proper data collection and analysis, one may not be able to conduct any meaningful measurement of costs and benefits: -

"...how much improvement are we expecting the training to achieve and how can we measure that?" 326

³²⁵ Kearns, P. (2000) Maximising Your ROI in Training, Delivering measurable added value through employee development. London: Prentice Hall. P.85.
326 Ibid. P.86.

Evaluation Processes

In terms of the evaluation processes, no single evaluation methodology should be excluded and, as far as possible, the evaluation process should utilise a number of different tools and measures. In deciding the methodologies account should be taken of: -

- The need for stakeholder involvement;
- Timeliness of the report;
- Cost to carry out the research;
- Appropriateness to the organisation;
- Skills available to carry out research.

In order to identify the benefits of training there is a need for proper and full evaluation of training. The EFQM system, through the process system, can be used by the organisation to ensure that it is effectively carried out. Evaluation information is vital for the good functioning of the PSNI Human Resources function, but equally it should be recognised that there is a need for the results of such exercises should be made open and public. This creates the catalyst for ensuring Training Branch meets their obligations to provide best quality training, and those outside of Training branch can make informed decisions.

Acquire the costs of training

Although training needs to be seen in the context of an investment, it is also vital that we understand the costs associated with such investments. In order that the operational system works there is a need to acquire the costs of the sub-sets of training delivery: -

- Identify needs of staff and the organisation
- Identify best way to achieve training outputs
- Deliver quality training, and
- Evaluation of training outputs

Each of these has a cost attached to it and all must be discovered if the model is to work.

Common Costing Model

The costs of training within the PSNI are currently estimated as £89 million + or - 10%. As one interviewee stated, "I think that the current cost of training is about £89 million plus or minus 10%. It is a lot of money sloshing about without tangible account as to whether it is well spent." The concern is that this is a mere estimate and the real costs are still unknown. The TED³²⁷ must as a matter of urgency fulfil its promises to develop a full and open costing system that will allow internal and external scrutiny. The model should be based upon an accepted system and must be capable of showing the full costs including

³²⁷ Training Education and Development, Primary Reference Document. Unpublished RUC report, January 2001. P.26.

opportunity costs through extraction. Currently the Association of Chief Police Officers (ACPO) and the Association of Police Authorities (APA) are supporting a national project on "Best Value in Police Training". It is hoped that a national costing model will be identified from this work.

If the PSNI are to get a full understanding of training costs then there is a need to calculate the following:-

- trainee salaries / benefits / "lost opportunity costs" (if someone replaced a person who was in training, how much did the replacement person cost?)
- trainer travel costs and other expenses
- training admin. support costs (salaries & benefits)
- training management costs
- training site costs (training rooms, offices and storage rooms)
- training equipment (rental, purchase and maintenance)
- training materials (paper, pens, handouts, videos, software, manuals)
- catering
- marketing
- postage and telephones
- local overheads (light, heat, etc.)
- all other direct training costs and their associated labour (needs analysis, design and evaluation)

Many of these costs have not been available except under a single cost area for Training Branch. A one-off piece of work could create the necessary information systems to identify the costs set out above. Once developed, these could be managed under a common information system.

Opportunity costs are one of the greatest costs to training events. There is a need to identify ways of reducing these costs. Travel time for students can account for a proportion of their absence from duty. The cost of one trainer brought to another location can save ten to fifteen times that amount if students do not have to travel so far.

The Cost of Not Training

In addition a new view should be taken in respect of identifying the needs of training, although I have already discussed the requirement for proper needs analysis, there is also a sense in which we must be seen to identify the cost to the PSNI of not training staff. It was identified from the research that untrained staff reduce the quality of service the PSNI supplies. A respondent said, "...operational officers can become very rusty, but, there does not seem to be a consideration of the detriment to the overall performance of the organisation by officers not having the full skills to do their job." But this needs to be formalised into the concept of the cost of not training. If there is no cost in not training, then why train? There may be rare occasions where training is purely a legal requirement, however, even these will have a social cost if not fulfilled and may

result in increased litigation, complaints or poor staff morale. There is therefore a need to develop proper written business cases before training is agreed, never mind delivered. The business case should contain the perceived need and the benefits of the training to the individuals and the organisation. The business case should include the perceived benefits through cost savings or social benefit of running such training. If the business case is not persuasive then the training should not be run. Such processes can provide a means for prioritising of training within limited resources. These business benefits should be compared against the training costs as discussed below.

The current view that commanders do not worry about the cost of training as they do not pay is unacceptable and has resulted in inappropriate training being delivered to the wrong people. Proper devolved budgets must be introduced which will place the onus on commanders to ensure that training is specific and good value. The information of proper costings, evaluation reports and devolved budgets will allow commanders to make informed decisions on spending money and also allow the choice of where to go to obtain the training they require for their staff.

The challenge for the costing of training in the PSNI is moving from very little measurement of costs to costing the whole of the training process, including the value of the outcomes of the training to be delivered.

Assess the value of training

Having identified the need to evaluate training properly and to identify the real costs of training, I will combine this thinking to focus on the top level of evaluation in terms of the results at an organisational level. As I have stated earlier, identifying the costs and benefits of training and development is still a rarity in today's cost-conscious age but some authors such as Salinger and Deming (1982)³²⁸ believe it is the ultimate assessment and they quote Easterby-Smith: -

"Nevertheless, it is still argued by influential authorities such as Michael Scriven (1967), that evaluations should always attempt to examine the value of any particular programme. According to Hesseling (1966), evaluation research should be aimed at providing a systematic and comprehensive measure of success or failure for training programmes."

Training either adds value or it does not. I can link this to the results in Chapter Five, where the idea of proper needs analysis was very strong. This was no accident; commanders identified that they want benefits from training and improvement in performance. They saw for themselves the importance of identifying improvement in performance within the needs analysis and ensuring that training is delivering the anticipated improvements. An interviewee when asked how we can gauge the value of training replied, "By asking the question, why?"

³²⁸ Salinger, R. and Deming, B. (1982) Practical Strategies for Evaluating Training. <u>Training and Development Journal</u>. Vol 36. No 8. pp 20-29.

The quality of training provided and the validation of the objectives will provide a measure to Training Branch of the value of their training design and methods. They will need to show they are employing effective and efficient training systems to meet the best value challenge that is likely to be placed upon the police service in Northern Ireland.

All Training should have a Value

One area that was highlighted as a potential problem in evaluation within the RUC/PSNI was training which is non-technical or can be considered as delivering soft skills. Many respondents indicated that it was almost impossible to measure the improvement in respect of training such as leadership programmes. However, if it is not measurable as an improvement in performance why are people being trained in the first place and what are they being trained in? It is clear when we carry out our needs analysis we must be much more robust in identifying what benefits we hope will accrue from an intervention and this identification must be as specific as possible. There is a need to move away from spending money on off-the-shelf management courses that do not provide tangible results or outcomes.

The process of valuing training is not a scientific formula. Police training is traditionally looking for conclusive evidence of linkage, it is time to move on to a persuasive approach in terms of valuing training. There is a need to make a value judgement based upon the proper costing of training and the evaluation

systems which must be put in place linked to the original needs. There must be an agreement on the problem and the value of solving it. This should involve an expected pound value gained by eliminating the deficiency and so creating a tangible projection. An outline of how to solve it can be identified. The measurement of how to track and report the performance improvement can be developed. The measurements can be what the sponsor accepts as persuasive evidence that the training produced the result.

There is therefore a logic to working with strong probabilities that learning is linked to business results, especially if there is a causal link between a particular skill deficiency and a particular business outcome. It is possible to look at whether the returns are appropriate to the expenditure in an organisational context. It is about making both formal and informal assessments. The outcomes of training as seen in the workplace can be accounted directly against the training costs, and if they have been considered at the start then the complexity should be much less. As an interviewee stated when considering value for money, "...before I would send them to (training) I would consider...that they will be able to undertake tasks which they couldn't before."

There are three basic structures that must be linked in order to connect the ends being pursued with the means at our disposal: financial, operational and behavioural. Decomposing the financial measurement systems will provide the link to operational measurement systems although the "fit" will never be perfect.

Similarly, analysing the operational measurement systems allows us to make connections to behavioural phenomena.

In the way described above, some interventions can be targeted and the value of others determined. This is not to say that I have not taken any account of the other factors which may influence the success of training, however, if we take a persuasive account of training and outcomes then we should be able to predict if training will be a success. If training is not well received at the end of the event it is unlikely to have a success in the workplace so early measures can contribute to ensuring we are delivering a quality product. Managers in the police like other public sectors have to make critical judgements on a regular basis. In this case they are being asked to make sound choices which will solve problems and add value.

Costs and Benefits

In the past there was little or no audit of the costs and benefits of training, the Report of the Independent Commission on Policing for Northern Ireland³²⁹ was the first time that this issue was officially highlighted and considered. Many of the respondents to the study stated that identifying costs and benefits was too difficult, as one respondent said, "I think the evaluative assessment link is traditionally very difficult. I think it is problematic to identify the connection

³²⁹ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999) A New Beginning: Policing in Northern Ireland. HMSO. P.26.

between the investment and the return from that investment in operational policing terms." In the future, the creation of a new Policing Board will mean that external scrutiny will become much more acute and we will have to be properly accountable.

So when should the PSNI do a full examination of the costs and benefits of our training? Many authors such as Rutherford³³⁰ recommend staying away from these unless it is demanded or unless it can be used to serve some purpose. He states that in many organisations, doing a cost and benefits analysis has become a ritualistic practice and, as a result, has lost much of its punch and the exercise is little more than a culturally supported sham. There is also a question as to why the police organisation is focused on training outcomes for return on investment. but does not yet appear to ask the same questions of other departments such as the administration, operations and personnel departments. The reality is with the advent of best value reviews these functions may now come under similar scrutiny. Many of our current training programmes are brief one or two day courses and run only occasionally. The cost of conducting an analysis of the costs and benefits on these outweighs the benefits of the analysis itself. However, proper costs and clear indicators of the training outcomes must still be made available. On the other hand, if a programme is large or costly due to the regularity of its running or for an organisational reason, it is felt necessary to conduct such an analysis, then I recommend it should be carried out. The results

³³⁰ Rutherford, P. (2001) Discussion area of www.groups.yahoo.com/group/roinet.

of this research indicate that this is what the members of the organisation, including the commanders, want.

Nickols (1979)³³¹ describes a process he calls "measurement based analysis," a method of analysing the organisation's performance measurement systems. The breaking down of the component yields maps of the various financial, operational and functional measures in an organisation's performance measurement systems. He states that identifying these systems is fairly straightforward and entails little more than repetitively asking three questions: -

- 1. What is the performance measure?
- 2. How is it calculated?
- 3. What are its component variables?

Phillips (1997)³³² states that hard data are the typical performance measures in almost every organisation. They are easy to assign monetary value: -

- Output -units produced, items sold, productivity, etc.
- Costs -unit costs, operating costs, cost savings, etc.
- Time -processing time, equipment downtime, overtime, etc.
- Quality -waste, scrap, error rates, rejects, etc.

Nickols, Fred. (1979) Finding the bottom-line payoff of training. Training & Development Journal. American Society of Training and Development. November 1979.

332 Phillips, J. J. (1997) Handbook of Training Evaluation and Evaluation and

Phillips, J. J. (1997) Handbook of Training Evaluation and measurement methods (3nd Edition) London: Kogan Page. PP.127-128.

Soft data are behaviour based, difficult to measure and difficult to assign pound value: -

- Work Habits -absenteeism, violation of safety rules, etc.
- Work Climate -employee turnover, job satisfaction, etc.
- Feelings/Attitudes -employee loyalty, perceived changes in performance, etc.
- New Skills -decisions made, conflicts avoided, etc.
- Development/Advancement -number of promotions, pay increases, etc.
- Initiative -implementation of new ideas, successful completion of projects, etc.

Benefits must not only be looked at in monetary terms, instead it should be in causal relationship terms which is where management mainly concentrates its focus. The added value of training has to be proportionate as stated by a respondent, "The returns must be proportionate to the expense of the training. I need to look at it and ask how much of an investment is this?"

The value added by doing a piece of cost and benefit analysis is to increase the understanding of the relationships between input and outcomes for an

organisation and provide management with right information for decision-making. Management (and business success) is all about getting the right information at the right time. So, the "bottom line" is to only do a full costs and benefit analysis when it is practical and appropriate. The results of this research identified a feeling that trainers and educators are happy to live in a world isolated from reality. The product they provide is not necessarily linked to the needs within the workplace or organisational need. Using the model proposed in this study will ensure this no longer happens.

I believe that showing value is critical. However, I do not necessarily believe, after digesting this research for the last three years, that it can be solely in pounds and pence. What the PSNI needs are effective processes, resources and solutions at a reasonable cost that help them reach their objectives. Sometimes these results will be fully quantifiable (hard data), and at other times they will be only qualitative in nature (soft data). The PSNI needs to ensure that the training being undertaken fits like a hand in glove into the business strategies, goals and objectives of the organisation. We need to put the right pieces in place to come as close as humanly possible to being able to guarantee that what is learned will get used. What we do not need is a mathematical formula that generates a score based upon subjective data.

Monitor and Control System

In order to ensure that the model works it is necessary for the system to monitor and control the operations. Although this is the smallest system within the model, it is vitally important in ensuring that the other systems are maintained and controlled correctly. Figure 12 shows how the sub-systems interact to sustain the model.

Monitor the activity of the AS and OpS

Identify measures of success for the Organisation

Review actions within the System

Link to influences outside the system

Figure 12. The Monitor and Control System

Each of the sub-systems will be considered in detail.

Monitor activity of the awareness system and operational system

The success of the model is dependent upon all of the processes within the Awareness System and the Operational System being undertaken and the necessary linkages made within the model. It is therefore necessary to monitor all of the activities within the Awareness System and the Operational System. It is not just a matter of ensuring that that each of the sub-systems is being conducted in accordance with the good practice discussed within this chapter, but that the interdependencies and timings are correct to ensure that the systems can function.

Identify measures of success for the organisation

Part of the process of ensuring control of the model is to identify measures of success. These are standards that the model must achieve if it is to be seen to work in the real world. Some of the measures have already been discussed under the sub-system 'Deliver quality training'. The list below sets out additional measures which the PSNI could use to identify success: -

- Legal standards such as Best Value reviews;
- Educational standards such as Occupational Standards and National Vocational Qualifications;
- Police standards such as those set by Association of Chief Police Officers in strategic guidance papers, HMIC protocols, Competency Framework or good practice guidance from National Police Training;
- PSNI policy requirements, or internal performance indicators (P.I.'s);

- Minimum policing requirements from external sources such as police liaison committees; and
- Public confidence.

Many of these measures already exist and others could easily be put in place or adjusted to collect the relevant information.

Review actions within the system

This model has been developed from the results of the research and a review of the theoretical literature. As stated at the beginning of this thesis, this is the best model that can be identified at the time of the research and does not represent the only possible model. The model has to be living and continuously under review. Each of the areas in the sub-systems should be reviewed to ensure that they continue to be the most valid approach especially during a period of immense change within the Police Service in Northern Ireland as the result of the implementation of the Report of the Independent Commission³³³. The review of actions of the sub-systems can also identify when appropriate changes should be made to make the model more efficient.

³³³ The Report of the Independent Commission on Policing for Northern Ireland, (September 1999) A New Beginning: Policing in Northern Ireland. HMSO.

Link to influences outside the system

The functions of the PSNI do not exist in a vacuum. Policing interacts with the world outside, both in terms of other organisations and the public. Figure 6 in Chapter Six was the rich picture relating to the development of the model. Within this rich picture were a number of influences from outside the systems, these were shown above the dotted line. These included The United Kingdom Government, the Northern Ireland Office, the Northern Ireland Assembly, Her Majesty's Inspector of Constabulary (HMIC), the Police Authority for Northern Ireland, other training providers and of course the public which the PSNI serve.

The influence of these stakeholders increases or decreases dependant on circumstances. Sub-systems of the model can be affected by such influences and can upset the fine balance of the model as a whole, making it less applicable. It is therefore necessary to monitor and review the influences outside the system and if necessary amend the sub-systems to maximise the effectiveness of the model. If there are changes outside the system that produce legal, political or policing change, then this should be linked to the relevant part of the model. Some of the measures that are identified to monitor the success of the organisation should be linked to influences outside the system. There are a number of potential external changes that may have an affect on policing in the near future. The changes which may influence the model include: the successful implementation of new Local Policing Boards; changing local community needs; the Northern Ireland Equality Scheme; shifting political climate either towards or away from a

peaceful environment; a new HMIC; changing social trends, for example, on use of drugs; and emerging examples of good practice in training.

Concluding Comments

In this chapter I have discussed the model of costs and benefits of training within the PSNI. I have had the opportunity to fully appreciate the extent of the journey that I have taken in completing this study. I have travelled from the development of the study aims, through the extensive literature review, identification of the methods for data collection and subsequent analysis, to the presentation of the final model in the context of the real world. The learning and insights during the period of the study have provided me with a unique opportunity for personal development.

Specifically I have provided a narrative of the various processes within the systems and sub-systems. Based upon the results of the research and the review of the available literature, this model is proposed as the most appropriate for the PSNI at this time. I have explained that there are three distinct systems within the model. The first of these is the Awareness System that will set the culture and understanding of the organisation if it is to be possible to identify the costs and benefits of training. It provides that the service must understand training and how it can interact and support the organisation. There must be an understanding of

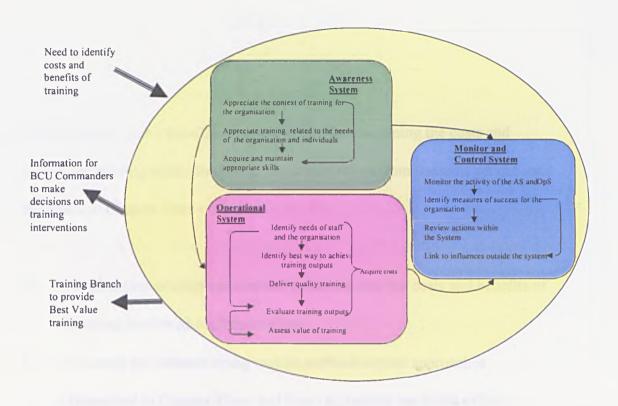
the importance of identifying the needs if training is to be a benefit. And there must be an appreciation that the correct skills need to be nurtured.

The second system is the Operational System, this is the doing phase of the model and where we must identify the needs, identify how to achieve the training outputs and so deliver a quality product. This product must be fully evaluated to test its value and worth. All of these sub-systems need to be costed under a standard costing system. Once this information is available, it will be possible to assess the value of the training against the identified costs. The operational system is pivotal in the model and proper identification of needs, clear measures of evaluation and proper costing will provide the basis for information to make good management decisions.

The third system is the Monitor and Control System, this is the maintenance phase. Proper monitoring of activities in the other systems, clearly defined measures of success, and review of actions ensure that the model is a living process always trying to develop and improve. One key element is to ensure that the measures of success are linked to influences outside the model.

The model shown again in full in Figure 13 has been derived from theory and field study and creates the necessary processes to support identifying the costs and benefits of training within the new Police Service for Northern Ireland.

Figure 13. The conceptual model in PSNI.



Finally, I believe the ideal situation we are trying to achieve is that were not one pound is being spent on training which does not have a very good chance of producing genuine, positive business results.

CHAPTER EIGHT

IMPLICATIONS

Within this research I have developed a model for examining the costs and benefits of training within the PSNI. The model arises from the aims set out for this study in Chapter One: -

- To examine existing systems and processes into the costs and benefits of training (reviewed in Chapter Two).
- To carry out research using various methodological approaches
 (described in Chapter Three and Four) to identify the needs of the
 organisation in respect of the costs and benefits of training (reported in
 Chapter Five).
- 3. To develop a logical model for identifying the costs and benefits of training within the PSNI (developed in Chapter Six and reported in Chapter Seven).

In Chapter Six and Seven I have fulfilled the main purpose of this research and developed a model for practical implementation of identifying the costs and benefits of training within the PSNI. This model was designed from the perspective of both the stakeholders within the organisation who provided their

views and experiences, and use of the available literature. The study provides a model for use by non-economists who practise planning, decision making and management every day in the PSNI. These people have responsibility for solving a most crucial problem in training: how to decide on good quality and relevant training interventions within limited resources. This model provides the opportunity to do this in a structured way.

It has made an original contribution to the debate by seeking to examine all the processes needed to construct a workable model. As I have stated earlier, it is not the only approach, however, it is based upon strong research and will provide a positive solution to influence organisational effectiveness. This research has focused on an area which is of pressing importance within the training environment of the police service in Northern Ireland at a time of rapid change and increasing pressure to show proper use of resources.

As stated in Chapter Three, the context of this study was to demonstrate a unique, deep and meaningful grasp of research in the area of the costs and benefits of training within the PSNI. During my review of the available literature in Chapter Three, I did not find any reference to similar research having been completed in the police environment. There were no available models of costs and benefits of training within the PSNI or any other police organisation. The development of this model through the synthesis of research data and literature provides an original contribution to knowledge. I believe this new approach can

provide the basis for further work and research, some of which I have referred to at the end of this Chapter.

I would encourage the contribution provided by my model to be adopted by the Police Service within the United Kingdom as a means of fully supporting the training process. As it has been conducted under the auspices of a Bramshill Fellowship, the findings will be presented to training specialists at Centrex (formally National police Training). The full model and the systems within the model all provide areas of good practice and guidance for police training and others in the wider field of training who are not within the police environment, for example, in supporting Needs Analysis, delivering quality training and Evaluation. Each of these can contribute to solving business problems through training.

This research study has been focused on the PSNI. The data collection was from police employees, however, the review of the available literature was from generic sources. In view of this, the model developed provides an innovative approach to training and human resources related measurement in other situations. Many large public bodies have similar business needs in providing a public service to the local community and therefore this research could with adjustments be used equally in their environment. These adaptations would need to take account of their individual needs linked to their core business needs. Even

in the private sector, the principles upon which this model is based could be applied and adapted.

The model has been developed from a combination of the review of the literature in Chapter Two, careful consideration of the research methodology in Chapter Three and Analysis in Chapter Four, and the reporting of the results in Chapter Five. The model development was discussed in Chapter Six before being explained in detail in Chapter Seven. The thinking that I used in building these themes was carefully reasoned and can provide other academics and researchers with a sound platform for their own deliberations for developing theoretical and empirical studies.

By way of conclusion to this thesis, it is appropriate to consider two main areas arising out of this research. The first area relates to implementation issues for the PSNI organisation if they adopt the proposed model. The second area relates to further enquiry that should be undertaken which arises directly out of this research.

1. Implementation issues for the PSNI

I have presented the results of the research in a model of costs and benefits of training in the PSNI. Whether the design is sufficiently comprehensive in terms

of what is needed by the PSNI will only become apparent once it is put into practice. There are some key implementation issues arising from this study. I realise that within such a substantial work a large number of areas for improvement have been identified, however, I have focused on those areas driven most strongly from the model. These should not be confused with the measures of success discussed in Chapter Seven, although the issues related to implementation may also provide evidence on success or otherwise of the use of the model.

The model contains a number of issues that require an organisational policy response for its full effective implementation. In summary these are:

- A. The model proposed in this research should be tested in a real world environment. The model must be seen as a holistic approach that is capable of making significant changes to our training and development process.

 Implementation must include a robust system for monitoring, controlling and adjusting the model and policy as the system is developed in the future. The adoption of the model must be managed to ensure that all who are involved, understand and own the progression.
- B. There needs to be a new culture within the new Police Service in Northern Ireland that values training. Currently Training Branch is isolated from the rest of the service. The Force needs to embrace needs analysis, design,

delivery and evaluation as a necessity for the proper functioning of the organisation and see these as an investment. Everyone from the top of the organisation to the rank and file must understand how training supports the core business and without it the core functions cannot be carried out to best value principles.

- C. Arising out of point 'B' above is a need for all those involved in PSNI training and also all those involved in identifying and supporting the needs of the organisation to understand the organisation better. This is particularly important in understanding the core business and the strategic planning processes so that training is developed to meet the needs of the organisation and the individual, not just the individual in the hope that it may support the strategic vision. Similarly, those who command the service must understand training better and how it can contribute to the Force achieving its objectives.
- D. Training Branch staff need to have the necessary skills to use the model. The research has indicated that there is a lack of skills within the PSNI. Very often the knowledge has been assumed. It is impossible to create real change if the staff do not possess the critical skills to implement the benefits.
- E. A proper appraisal / development system needs to be identified and introduced as a matter of urgency. A robust performance development system

can contribute to identifying individual development gaps and linking these to organisational objectives.

- F. Individuals need to be identified with proper personnel skills within District Command Units to ascertain the business case for training and development. These individuals also need the ability to identify when training is not the answer to particular problems. They must understand how training and development contributes to successful policing. Devolving the training budget locally will transfer the onus for specific training to be undertaken based upon informed decisions.
- G. The Association of Chief Police Officers (ACPO) are currently undertaking research into agreeing a national model of training costs. Once identified, it should be adopted by the PSNI. This will provide a robust and open costing system which will allow scrutiny and benchmarking against other police services.
- H. Senior officers need to take a strategic view of training based upon the business case for the Force. This will require a shift in thinking and ownership which has not previously been present.
- I. A common approach to Needs Analysis needs to be adopted by the Force.
 Existing and emerging good practice in both the public and private sector

should be used to produce a tool-kit of approaches. These can then be employed in a standard way to identify the needs of the organisation and individuals in terms of training and development.

J. A common systematic evaluation methodology needs to be used to support the model. This should start from a bottom line approach described by Kearns (2000)³³⁴ and be conducted through the four level approach developed by Kirkpatrick (1983)³³⁵. The methods used should once again draw on good practice as discussed in 'I' above with clear measures set and agreed before the training takes place.

2. Implications for further research

As discussed earlier in this Chapter, I believe this new model and approach to identifying the costs and benefits of training in the PSNI can provide the basis for further research. Two main areas of future research are suggested out of this study which can be categorised as:-

A. The Value of Training.

Administrator, 28,11.

³³⁴ Kearns, P. (2000) Maximising Your ROI in Training, Delivering measurable added value through employee development. London: Prentice Hall. P.91.

³³⁵ Kirkpatrick, D. (1983), Four Steps to Measuring Training Effectiveness. Personnel

It has become obvious to me during the research that how people perceive and value training is different. I have at various stages made reference to this matter, however, a full analysis of how people value training was outside the scope of this study. It can be argued that such measures of value are subjective, but these measures may be made more objective if examined against the original purpose of the training and the trainee's perceptions of this. If ultimate value is improvement against cost, there is a strong inclination to measure it in pounds and pence. However, this research has indicated that the value is more of a performance measure and needs to examine how people value and contribute. There is clearly a need for further research to be undertaken to examine the psychology of valuing and how it is applied to training and therefore, how it affects the view of benefits of training. Just as when we make a choice of value in purchasing a particular motor car, so similarly, purchasers of training must make a value judgement on the training being offered. There is a real need for a greater understanding of what the individual trainee and the organisation may see as good value in training and how we can measure this effectively.

B. Influences of other factors.

The success of the model means measuring the relationship between training interventions and the outcomes. There is often a wide range of variables affecting the policing business. Work should be undertaken to identify not only what training is required, but also why instances of training have particular or different impacts. As a further development, it is suggested that an ability to predict these

outcomes in advance of the expenditure of resources would increase greatly the added value of efforts to monitor the returns to training.

Bibliography

Albrecht, T. L., Johnson, G. M. and Walther, J. B. (1993) 'Understanding Communication Processes in Focus Groups' in D. L. Morgan (editor) Successful Focus Groups: Advancing the State of the Art. Newbury Park, CA.: Sage

Alexander, A. (2000) The Police and Best Value: Applicability and Adaption, Policing and Society, 2000, Vol. 10.

Allinger, G. M. & Janak, E.A. (1989) Kirkpatrick's levels of training criteria: Thirty years later. Personnel Psychology. Vol.42

Army Training Support (March 1993) The Systems Approach to Training, Job analysis for training. London: HMSO.

Aspinwall, K., Simkins, T.Wilkinson, J. F. & McAuley, J. (1992), Managing Evaluation in Education. London: Routledge.

Audit Commission. Police Paper No.4 The Management of Police Training. (1989).

Babbie, E.(1995) The Practice of Social Research. USA: Wadsworth Publishing Co.

Becker, P.H. (1993) Common pitfalls in published grounded theory research. Qualitative Health Research, No.3.

Bee F. & Bee R. (1994) *Training needs analysis and Evaluation*. London: Institute of Personnel Management

Bell, J. (1995), Doing your Research Project: A Guide for first-time Researchers in Education and Social Science (2nd Ed.). Buckingham: Open University Press.

Boam, R. and Sparrow, P. (1992). Designing and Achieving Competency: A competency approach to developing people and organisations: Maidenhead: McGraw-Hill.

Booth, S. (1992). Learning to Program: A Phemonographic Perspective. Göteborg: Acta Universtatis Gothoburgensis

Bourne, M. & Bourne, P. (2000) Do you Know the Score? Professional Manager. November 2000.

Bourque, L. B. and Clark, V. A. (1992) Processing Data. The Survey Example, London: Sage Publications.

Bowden, J. A. (1996) *Phenomenographic research – Some methodological issues*. Dall'Alba, G. and Hasselgren, B. Eds. Goteborg, Acta Univertatis Gothoburgensis.

Bowling, A. (1997) Research Methods in Health. Buckingham: Open University Press

Bramley, P. (1990), Evaluating Trainer Effectiveness, Translating Theory into practice. Maidenhead: McGraw - Hill

Bramley, P. (1986), Evaluation of Training, A Practical Guide. London: Gwynne Printers Ltd.

Brewer J., Guelke A., Hume I., Moxon-Browne E. & Wilford R. (1988) *The Police Public Order and The State. Policing in Great Britain, Northern Ireland, The Irish Republic, The USA, Isreal, South Africa and China.* London: MacMillan Press.

Brinkerhoff, R. (1981). Making Evaluation More Useful. Training & Development Journal, 35,12, 66-70.

Brinkerhoff, R. O. (1988). An integrated evaluation model for HRD. Training and Development Journal, February 1988

Brion, M. & Newby, T. (1981). Research & Training-A Two Way Exchange. Training Officer, 17,9, 254-56.

Brogden, M. (1982) The Police Autonomy and Consent. London: Academic Press

Brookfield, S. (1982). Evaluation Models & Adult Education. Studies in Adult Education, 14 Sept.

Brown, P. and Hickey, M. (1990). Validation - Cost Effective External Evaluation. Australian Journal of Educational Technology, 6(2)

Bryant, J. (1989) Problem Management. J Wiley: Chichester.

Buckley, R. and Caple, J. (1992), *The Theory and Practice of Training* (2 nd Ed). London: Kogan Page

Bumpass, S. (1990) Measuring participant performance - An alternative. Australian Journal of Educational Technology, 6(2).

Burgoyne, J. G. & Cooper, C. L. (1975). Evaluation Methodology. <u>Journal of Occupational Psychology</u>, 48.

Bushnell, D. S. (1990). *Input, process, output: A model for evaluating training*. Training and Development Journal, March,

Bynner, J. and Stribley, K. M. (1979) Social Research: Principles and Procedures. London: The Open University.

Chadwick, B. A., Bahr, H. M. and Albrecht, S. L. (1984) Social Science Research Methods. New Jersey: Prentice-Hall.

Checkland P, (1999) Systems Thinking, Systems Practice. Chichester: J Wiley.

Checkland P. and Scholes J. (1991): Soft Systems Methodology in Action, Chichester: John Wiley & Sons.

Checkland P. (1993) Systems Thinking, Systems Practice. Chichester: John Wiley & Sons.

Checkland, P. & Scholes, J. (1999) Soft Systems Methodology in Action. Chichester: J Wiley.

Clandinn, D. J. & Connolly, F. M. (1994) Personal Experience Methods. In Handbook of Qualitative Research, Ed Denzin, N. K. Lincoln, Y. S. Thousand Oaks, C.A.: Sage

Clegg, F. (1982) Simple Statistics. Cambridge: Cambridge University Press.

Clement, R. W. & Aranda, E. K. (1982). Evaluating Management Training: A Contingency Approach. Training & Development Journal, 36,8.

Coffey A. and Atkinson P. (1996) Making Sense of Qualitative Data Analysis: Complementary Strategies. California: Sage

Cohen, L. and Manion, L (1994) Research Methods in Education, 4 Edn, London: Croom Helm

Cohen, L. and Manion, L.(1989) Research Methods in Education. London: Routledge

Covert, R. W. (1984). A Checklist For Developing Questionnaires. Evaluation News, 15,4.

Cronbach (1963) Course Improvement through Evaluation. San Francisco: Jossey-Bass Publishers

Curwin, J. and Slater, R. (1991) Quantitative Methods for Business Decisions (Third Edition). London: Chapman & Hall.

De Neufville, R. and Stafford J. H. (1971) Systems Analysis for Engineers and Managers. New York: McGraw-Hill

Dixon, N. M. (1990) The relationship between trainee responses on participation reaction forms and post test scores. <u>Human Resource Development Quarterly</u> Vol.7 No.1

Duncan, W. J. (1984). Planning and Evaluating Management Education and Development: Why So Little Attention to Such Basic Concerns? Journal of Management Development, 2,4, 57-68.

Easterby-Smith, M. & Tanton, M. (1985). Turning Course Evaluation From an End to a Means. Personnel Management, April.

Easterby-Smith, M. (1981). The Evaluation of Management Education & Development: An Overview. Personnel Review, 10,2.

Easterby-Smith, M. (1986), Evaluation of Management Education, Training and Development. England: Gower.

Easterby-Smith, M. (1994), Evaluating Management Development, Training and Education. England: Gower.

Edwards J. (1991) Evaluation in Adult and Further Education - A Practical Handbook for Teachers & Organisers. Liverpool: The Workers' Education Association.

Egan, G. (1990), The Skilled Helper, A systematic approach to effective helping (4th Edition). California: Brooks / Cole Publishing.

Ellison, J. (1997) Professionalism in RUC. Belfast: University of Ulster.

Employment Department (1991). *Investors in People* -The National Standard, No 1. Employment Department: Sheffield

Fagan, T. K., and Wise, P. S. (1994) School Psychology: Past, Present, and Future. New York: Longman

Fielding, N. and Fielding, J. (1986) Linking Data. London: Sage.

Fowler, F. J. Jr. (1993) Survey Research Methods (Second Edition). London: Sage Publications.

Fowler, F. J. Jr. and Mangione, T. W. (1990) Standardised Survey Interviewing. London: Sage Publications.

Foxon M., Evaluation of training and development programs. <u>Australian Journal of Educational Technology</u>, (1989), 5(2), 89-104.

Foxon, M. J. (1986). Evaluation of Training: The Art of the Impossible. Training Officer, 22, 5.

Francis-Smythe, J. (1998) Maximising Effectiveness and Minimising Abstractions (MEMA) in Police Training, University College Worcester.

Glaser, B.G. (1978). <u>Theoretical sensitivity</u>. Mill Valley, California: Sociology Press.

Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative research. Chicago: Aldine

Guba, E.G. and Lincoln, Y.S. (1994) Competing paradigms in qualitative research in N. Denzin and Y Lincoln (eds), Handbook of Qualitative Research. London: Sage.

Gummesson E. (2000) Qualitative Methods in Management Research (2nd Ed). Thousand Oaks: Sage

Hamblin, A.C. (1974) Evaluation and Control of Training. London: McGraw Hill

Hammersley, M. (1990) Reading Ethnographic Research, A critical guide, London: Longmans

Hammersley, M. (1992) What's wrong with Ethnography? Methodological Explorations. London: Routledge

Harris, R. (1978) The Police Academy and the Professional Self-Image. USA: Goodyear.

Harrison R. (1988), *Training and Development*, London: Institute of Personnel and Management.

Hequet, M. (1996) Return on Training Investments -Non-financial Approach. Training Magazine, March 1996

Herbert, M. (1990) Planning Your Research Project, London: Cassell.

Hessling, P. (1966), Strategy of Evaluation Research in the Field of Supervisory and Management Training, Anssen: Van Gorcum.

Hewitt, B. (1989). Evaluation a personal perspective. Training and Development in Australia, 16(3).

Hibberd M. and Bennett M. (1990) Questionnaire and Interview Surveys. A manual for Police Officers, London: The Police Foundation.

Hibberd, M (2000) Focus Groups. Unpublished Papers. London: The Police Foundation.

Hibberd, M. (1990), Research and Evaluation, A Manual for Police Officers. London: The Police Foundation.

Hibberd, M. (1994) *Using Surveys: A guide for Managers*. London: The Home Office Police Research Group.

Holton, E. F. (1996) *The flawed four-level evaluation model*. <u>Human Resource Development Quarterly</u>, Vol 7 No.1.

Home Office Circular 105/1991, The Evaluation of Training in the Police Service. London: HMSO.

Home Office Circular 114/1983, Manpower, Effectiveness and Efficiency in the Police Service. London: HMSO

Home Office Circular 39/1993, Future Management of Police Training. London: HMSO.

Home Office Circular. (29th December 1986) Costing and Financing of Police Training. Home Office: London.

Hopwood, Anthony (2000) Costs count in the strategic agenda. Mastering Management. November 2000.

Jackson, T. (1989), Evaluation: Relating Training to business performance. London: Kogan Page.

Janis, I. (1972) Victims of Groupthink: A Psychological Study of Foreign Policy Decisions and Fiascos. Boston: Houghton

Jones, J. A. G. (1988) *Improving Trainer Effectiveness*. Editor Roger Bennett., New York. Kogan Page.

Juran, J. M. (1989). Juran on leadership for quality. New York: The Free Press.

Kalton, 0. (1983) Introduction to Survey Sampling, London: Sage Publications.

Kaplan, R.S. & Norton, D. P. (1996), The balanced Scorecard, Translating Strategy into Action. USA: Harvard Business School Press.

Kaplan, R. S. & Norton, D. P. (1996) Using the Balanced Scorecard as a Strategic Management System. <u>Harvard Business Review</u>. January-February 1996

Kearns P. (1996) Evaluation-from the bottom-line backwards? Croner Training and Development Briefing. September 1996

Kearns, P. (2000) Maximising Your ROI in Training, Delivering measurable added value through employee development. London: Prentice Hall.

Kearns, P. & Miller, T. (1996) Measuring the Impact of Training and Development on the bottom line, An Evaluation Toolkit to make Training Pay. England: Technical Communications (Publishing) Ltd.

Kearsley, G. (1982) Costs, benefits and productivity in training systems. London: Addison-Wesley Publishing

Kelly, G. (1955), The Psychology of personal constructs, London: Norton.

Kenney J. and Reid M. (1988), Training Interventions, London: McCraw Hill.

Kenney, J. & Reid, M.A. (1986), *Training Interventions*, London:Institute of Personnel Management.

Kirk, J. and Miller, M. (1986) Reliability and Validity in Qualitative Research, London: Sage.

Kirkpatrick, D. (1983), Four Steps to Measuring Training Effectiveness. Personnel Administrator, 28,11.

Kirkpatrick, D. L (1977). Evaluating Training Programs: Evidence vs. Proof. Training & Development Journal, 31,11, 9-12.

Kirkpatrick, D. L. (1994) Evaluating Training Programs: The four levels. San Francisco, Berrett-Koehler.

Krippendorf, Klaus (1980) Content Analysis: an introduction to its methodology, London: Sage.

Krueger, R. A. (1994). Focus groups (2nd ed.) Thousand Oaks: Sage

Kuraitis V. P. (1981). 'The Personnel Audit.' Personnel Administrator. Vol.26, Part II.

Levin Henry M. (1985) Cost-Effectiveness A Primer - New perspectives in evaluation. Volume 4. London: Sage Publications.

Levine, E. Ash, R. (1983) Evaluation of job analysis methods by experienced job analysts, Academy of management journal, 26.

Lewis, Philip and Thornhill, Adrian. (1994). *The Evaluation of Training: An Organisational Culture Approach*. Journal of European Industrial Training, Vol.18 No.8, 1994

Macleod C. J. and Hockey, L. (1989) Further Research for Nursing, London: Scrutari Press.

Maisel, L. S. (1992) Performance Measurement: The Balanced Scorecard Approach, Journal of Cost Management, Summer, 1992

Manpower Services Commission (1981) Glossary of training terms. (3rd Edition). London: HMSO.

Marsden, M. J. (1991) Evaluation: Towards a definition and statement of purpose. Australian Journal of Educational Technology, 7(1),

Martin, P.Y. and Turner, B. A. (1986) Grounded Theory and Organizational Research. The Journal of Applied Behavioural Science, (22:2).

Marton F. (1986) Phenomenography - a research approach to investigating different understandings of reality. Journal of Thought. 21(3)

Marton, F. (1994) *Phenomenography*. In Husen, T. and Postlewaite, N. (Eds) *The International Encyclopedia of Education*, Oxford: Pergamon

Mason, J. (1996) Qualitative Researching, London: Sage

Mayo G. D. & Dubois, G. H. (1987), The complete book of Training: Theory, Principles and Techniques. London: University Associates.

McQueen, R. and Knussen, C. (2002) Research Methods for Social Science. An Introduction. Essex: Pearson Education Ltd.

Meaklim, T. (1997) An Evaluation of the Initial training of Traffic Wardens within the Royal Ulster Constabulary. Unpublished Thesis: The University of Hull.

Measor L. and Woods P. (1991) Breakthroughs and Blockages in Ethnographic Research: Contrasting experiences during the 'Changing Schools' Project, in Walford G. (Ed.) Doing Educational Research, London: Routledge

Michelli, D. & Haskins, G. (1997) Measuring Learning and Transferring it from Programme to Practice, Conference Proceedings, Assessment Measurement, Evaluation Conference; Linkage Inc

Miles M. and Huberman M. (1994) Qualitative Data Analysis, London: Sage

Miller, T (1997) Making Training Pay: Supporting Business Strategies and Adding Value. Conference Proceedings, Assessment Measurement, Evaluation Conference; Linkage Inc.

Mintzberg, H. (1979) An Emerging Strategy of Direct Research. Administrative Science Quarterly, 29.

Mishan, E. J. (1988) Cost Benefit Analysis (4th Edition) London: Unwin Hyman.

Moore, N. (2000) How to do research. The complete guide to designing and managing research projects. London: The library Association

Morgan, D. L. (1997) Focus Groups as Qualitative Research (2nd Ed). London: Sage

Morgan, D. L. (1995) Why Things (Sometimes) Go Wrong in Focus Groups, Qualitative Health Research, vol. 5, no. 4,

Moser, C.A. and Kalton, G. (1971), Survey Methods in Social Investigation (2nd Ed.). London: Heinemann.

Newby, A. C. (1992), Training Evaluation Handbook. Aldershot: Gower.

Nicklos F. (1992), The Evaluation of Training. in Medsker K. & Roberts D. (Eds) (1992) A.S.T.D. Trainers Toolkit: Evaluating the Results of Training. U.S.A: American Society of Training and Development.

Nickols, F. (1979) Finding the bottom-line payoff of training. Training & Development Journal. American Society of Training and Development. November 1979

Nouwens F. and Robinson, (1991) Evaluation and the development of quality learning materials. Australian Journal of Educational Technology, 7(2)

O'Brien M. (1993) Social research and sociology, in N. Gilbert (Ed), Researching Social Life. London: Sage

Olive, N. R. J. & Wetter, M. (1999) Performance Drivers - A Practical Guide to using the Balanced Scorecard. England: Wiley

Oppenheim, A. N. (1992) Questionnaire Design Interviewing and Attitude Measurement (New Edition). London: Pinter Publishers Limited.

Osborn, A. F (1963) Applied Imagination, Principles and Procedures of creative problem solving, 3rd Ed, New York: Charles Scribner's Sons.

Parsons John. (1991) Utility Analysis: A method of costing the impact of a training intervention. Psychological Services Customer Report 407. November 1991.

Patton, M. Q. (1980). Qualitative Evaluation Method. Beverly Hills, California: Sage.

Patton, M. Q. (1990) Qualitative Evaluation and Research Methods, 2nd Ed, London: Sage.

Patton, R., Brown, S., Spear, R., Chapman, J., Floyd, M. & Hamwee, J. (1985) (Eds), Organizations - Cases - Issues - Concepts. London: Harper and Row.

Penrose, E. T. (1980) The Theory of the Growth of the Firm (2nd Ed). Oxford: Basil Blackwell.

Pepper, A. D. (1992), Managing the Training and Development, London: Gower Publishing.

Phillips, J. J. (1991) Handbook of Training Evaluation and measurement methods (2nd Edition) London: Kogan Page.

Phillips, J. J. (1997) Handbook of Training Evaluation and measurement methods (3nd Edition) London: Kogan Page.

Police Act (Northern Ireland) 1970. London: HMSO.

Pollack, L. (1992), Do you agree? The Evaluation of Training or the Quest for the Holy Grail. Training and Development. October 1992.

Porter, S. (1996), *Qualitative Research*. <u>Journal of Advanced Nursing</u>. September 1996.

Preece, R. (1994) Starting Research. An Introduction to Academic Research and Dissertation Writing, London: Pinter.

Project Fforward Partnership White Paper, The Police Federation, Create Consulting and the IBM Corporation

Rea, L. (1986), How to Measure Training Effectiveness. London: Gower Publishing.

Reece I. & Walker S. (1997) *Teaching Training and Learning - A practical guide* (3rd Edition) England: Business Education Publishers.

Robson, C. (1994) Real World Research: A resource for Social Scientists and Practitioner-Researchers. Oxford: Blackwell

Robson, S. & Foster, A. (editors) (1989) Qualitative Research in Action. London: Edward Arnold.

Ross, N. Thomas, M. and Turner, B. (1991) The Shorter MBA. A Practical Approach to Business Skills. London: Harper Collins.

Rossi P. H. & Freeman H. E. (1993) Evaluation - A Systematic Approach. London: Sage.

Rummler G. A. (1987) *Improving Performance*. San Diego: Jossey-Bass Management Series.

Salinger, R. and Deming, B. (1982) *Practical Strategies for Evaluating Training*. Training and Development Journal. Vol 36. No 8.

Scriven M. (1967), The Methodology of Evaluation. Chicago: Rand-McNally.

Scriven, M. (1972) Pros and Cons about Coal-Face Evaluation. Evaluation Comment No 3.

Seale, C. (1999) The Quality of Qualitative Research, Introducing qualitative methods. London: Sage

Sharken S. J. (1999) Conducting Successful Focus Groups Fieldbook, LA: Amherst H. Wilder Foundation.

Silverman D. (2000) Doing Qualitative Research, A Practical Handbook. London: Sage.

Singleton, R., Straits, B., Straits, M. and McAllister, R. (1988) Approaches to Social Research, Oxford: Oxford University Press

Smith A.G. and Robbins A.E. (1982) Structured Ethnography: the study of parental involvement. American Behavioural Scientist. 26(1).

Spendolini, M. J. (1992) *The Benchmarking Book*. USA: American Management Association.

Stewart, D. W. & Shamdasani, P. N. (1990) Focus Groups: Theory & Practice. Newbury Park, California: Sage.

Strauss, A.L. (1987). Qualitative analysis for social scientists. New York: Cambridge University Press

Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, California: Sage.

Strauss, A.L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of qualitative research. Thousand Oaks, CA: Sage.

Swanson, R. (1998) Demonstrating the Financial Benefit of Human Resource Development: Status and Update on the Theory and Practice. Human Resources Development Quarterly, Vol. 9 (3)

The Market Research Society (2000) http://www.mrs.org.uk

The Report of the Independent Commission on Policing for Northern Ireland, (September 1999) A New Beginning: Policing in Northern Ireland: HMSO.

Thompson M. S. (1980) Benefit-Cost Analysis For Program Evaluation. London: Sage Publications.

Tobin, Daniel R. (1998) The Fallacy of Return On Investment Calculations. @ www.tobincls.com

Torrington D. and Hall L. (1987) Personnel Management. A New Approach. London: Prentice Hall.

Training Education and Development, Primary Reference Document. Unpublished RUC report, January 2001.

Treece E. W. & Treece J.W. (1982) Elements of Research in Nursing. St Louis, USA: The C.V. Mosby Company

Turner, B. A. (1981), *Practical aspects of Qualitative Data Analysis*. Amsterdam: Elsenier Scientific Publishing Co.

Tyler, R. W. (1950) Basic principles of curriculum and instructional design. Chicago: University of Chicago Press.

Warr P., Bird M. and Rackham N.(1970), Evaluation of Management Training, England: Gower.

Waterman, R. (1994) The Frontiers of Excellence. London: Nicholas Bealey.

Watson, C. (1986) Management Development Through Training. U.S.A.: Addison-Wesley.

Wigley, J. (1988). Evaluating training: Critical issues. Training and Development in Australia, 15(3),

Wills G. and Covell D. (1977), Tailor Making Managers, Resaerch Papers in Marketing and Logistics Studies. England: Cranfield School of Management.

Wilson, B. (1993) Systems: Concepts, Methodologies and Applications. (2nd Ed) Chichester: John Wiley and Sons.

Zenger, J. & Hargis, K. (1982). Assessing Training Results: Its Time To Take The Plunge. Training & Development Journal, Vol 36, No 1.

The Market Research Society Web Site

Key Principles of the MRS Code of Conduct

The key principles of professional market research - founded on honesty, objectivity, confidentiality and transparency - come from the <u>Code of Conduct</u>, drawn up by the Market Research Society and designed to support all those engaged in marketing or social research in maintaining professional standards throughout the industry. The new Code of Conduct is binding on all members of the MRS, as is adherence to the principles of the Data Protection Act

General Principles

- Research is founded on willing co-operation. It depends upon confidence that it
 is conducted honestly, objectively and without unwelcome intrusion or harm to
 respondents. Its purpose is to collect and analyse information, and not directly to
 create sales nor to influence the opinions of anyone participating in it.
- The general public and other interested parties shall be entitled to complete
 assurance that no information collected in a research survey which could be
 used to identify them will be disclosed to anyone else without their agreement;
 that the information they supply will not be used for purposes other than
 research and that they will in no way be adversely affected as a result of
 participation.
- Wherever possible, respondents must be informed as to the purpose of the research and the likely length of time necessary for the collection of the information.
- Research findings must always be reported accurately and never used to mislead anyone, in any way.

Responsibilities to Respondents

- Respondents' co-operation is entirely voluntary. They must not be misled when being asked for co-operation.
- Respondents' anonymity must be strictly preserved.

- Researchers must take special care when interviewing children, young people
 and other potentially vulnerable members of society. The informed consent of
 the parent or responsible adult must first be obtained for interviews with
 children.
- Respondents must be told if observation techniques or recording equipment are used.
- Respondents must be enabled to check without difficulty, the identity and bona fides of the researcher.

Professional Responsibility of Researchers

When acting in their capacity as Researchers the latter must not undertake any
non-research activities, for example database marketing involving data about
individuals which will be used for sales or promotional activity. Any such nonresearch activities must always be clearly differentiated from marketing research
activities.

Responsibilities to Clients

- Researchers must not disclose the identity of the client or any confidential
 information about the latter's business, to any third party, without the client's
 permission.
- Researchers must provide the client with all appropriate technical details of any research project carried out for that client.
- Researchers must ensure that Clients are aware of the Code of Conduct and of the need to comply with its requirements.

The Market Research Society (2000) http://www.mrs.org.uk

THE VALUE OF TRAINING QUESTIONNAIRE

Dear colleague,

Please take time to complete the attached questionnaire. It should take no more than ten minutes of your time to complete.

The questionnaire is intended to identify how managers in the police service perceive the value of training and what information is required to make such judgements.

The information gained from the questionnaire will be used to develop a model to take account of the costs and benefits of training for the service. This will benefit **you** in the future, as it will enable the Force to provide information which will allow informed decisions on how you spend your budget on training and the return you can expect on your investment.

The questionnaire is completely anonymous. You do not need to give your name if you do not wish to.

Please answer each question in the space given. If you need additional space you may write on the reverse of the page or on additional pages.

Once completed please return the questionnaire to Tim Meaklim at Brooklyn in the envelope provided.

Thank you for taking time to complete this questionnaire.

Tim Meaklim

1. Do you think that the outcomes of training currently provided by the RUC meets the needs at local level?
Yes
No
Please state the reason for your answer
2. Do you consider the current training provided by the RUC represents value for money?
Yes
No
Please state the reason for your answer
3. What further information do you think you require to make a considered judgement as to whether the expenditure on training is value for money?

4. If given the opportunity would you consider buying training from independent providers?
Yes
No
What factors (if any) would you consider in making such a choice? a) Factors (if any) for using other providers:
b) Factors (if any) against using other providers:
5. Do you have any additional comments you wish to make?
Thank you for taking time to complete this questionnaire. Please return it in the envelope provided to Tim Meaklim, Brooklyn.

Interview Schedule for semi-structured interviews

Introduction and ground rules for the interview:

Q. Firstly I want to ask you about what happens before training -

Do you consider that individual performance measures have been set for trainees?

- Q. Do you consider what value you will gain from sending an individual on a training event?
- Q. Do you take account of the cost of not training them?
- Q. How would you gauge this value?
- Q. Can you think of any ways that Training Branch could reduce the wastage around the current training set-up?
- Q. How would you see the costs you have identified being expressed?
- Q. What information would you wish it to contain and how could it be produced?

OPEN CODING THEORETICAL MEMOS

Evaluation measures need to be identified at TNA stage.

Culture change within the organisation to embrace evaluation.

Culture change within the organisation to see training as a benefit.

Training to become more cost effective.

Use of the police process and classification framework.

Training costs currently £89 million +/- 10% per annum (what is total budget).

Responsibility needs to be taken for costs of training.

Proper costing model identified.

Clear indicators of success need to be identified.

Comparisons need to be on same basis – like with like.

New National Training Organisation – NTO.

Training for role to reduce skills gap.

Undertake tasks couldn't before.

Devolved budgets would mean that commanders would have to make decisions on training.

Link of training to policing plans.

Competence framework for id of needs.

Minimum standards for statutory training.

Acquiring the correct skills to make a difference in the workplace.

Business cases for training interventions.

Assessments of costs and benefits.