

**THE DEVELOPMENT OF ROLES,
COMPETENCIES AND OUTCOMES OF
EDUCATION, TRAINING AND DEVELOPMENT
(ETD) FACILITATORS IN THE TEXTILE
INDUSTRY**

Izél Barnard, Hons. B. Com

Dissertation submitted in partial fulfillment of the requirements
for the degree Magister Commercii in Industrial and Personnel
Psychology at the Potchefstroom University for Christian Higher
Education.

Supervisor: Prof. S. Rothmann

Potchefstroom

2000

Opgedra aan my Pa

ACKNOWLEDGEMENTS

A special word of appreciation to the Textile Industry Training Board and in particular Mr David Bowen for the opportunity to compile this mini-dissertation as framework to guide their skills development priorities for ETD facilitators.

My sincere gratitude and appreciation to my father for his practical guidelines and advice throughout the compilation of this mini-dissertation.

To the task team of the CTFL SETA for ratifying the survey questionnaire.

For the support to deliver the final product, my appreciation to:

- Prof. Ian Rothmann, my mentor, for his professional guidelines and advice.
- Prof. G. v. d. M. Sieberhagen, assistant mentor, for his insight and guidelines.
- Dr. Lienkie Viljoen of the Statistical Consultation Services for the processing and interpretation of the empirical results.
- Prof. A Combrink for the professional manner in which the language editing was conducted.
- Ms Cornel Oosthuizen for the competent manner in which the typing and finalisation of the mini-dissertation was performed.
- My family and friends for their interest, love and support.
- My Heavenly Father for His guidance, strength and insight.

ABSTRACT

The new training dispensation in South Africa promotes an outcome-based approach to education and training. The textile industry has expressed a need to upgrade the training competence of Education, Training and Development (ETD) facilitators. The general objective of this research was to develop the roles, competencies and outcomes for ETD facilitators in the industry. A cross-sectional survey design was used to reach the research objective. A questionnaire was compiled to measure the role level and focus, competence in four categories and outcomes. A sample of 70 ETD facilitators representing 34 individual companies participated in the survey. The results showed that various ETD outcomes at different complexity levels are being reached through a combination of roles using a range of competencies.

OPSOMMING

Die nuwe opleidingsbedeling in Suid-Afrika bevorder 'n uitkomsgebaseerde benadering tot onderrig en opleiding. Die tekstielbedryf het 'n behoefte uitgespreek vir die opgradering van hul opleidingspersoneel ("ETD" fasiliteerders) se bevoegdhede. Die navorsingsdoelwit fokus op die ontwikkeling van rolle, bevoegdhede en uitkomstes van "ETD" fasiliteerders in die bedryf. 'n Dwarssnit opname-ontwerp is gebruik om die navorsingsdoelstelling te bereik. 'n Vraelys is ontwikkel om die rolvlak en -fokus, bevoegdhede in vier verskillende kategorieë en uitkomstes te meet. 'n Steekproef van 70 "ETD" fasiliteerders binne 34 individuele ondernemings het aan die empiriese ondersoek deelgeneem. Die resultate dui daarop dat "ETD" uitkomstes op verskillende kompleksiteitsvlakke bereik word deur die beoefening van verskeie rolle wat die benutting van 'n reeks bevoegdhede insluit.

CONTENTS

	Page
Acknowledgements	ii
Abstract	iii
Opsomming	iii
Contents	iv
List of Tables	viii
List of Figures	ix

CHAPTER 1: INTRODUCTION

1.1	Problems statement	1
1.2	Research objectives	6
1.2.1	General aim	6
1.2.2	Specific objectives	6
1.3	Research method	7
1.3.1	Literature review	7
1.3.2	Empirical study	7
1.3.2.1	Research design	8
1.3.2.2	Study population	8
1.3.2.3	Measuring battery	8
1.3.2.4	Data analysis	9
1.4	Glossary of concepts and terminology	9
1.5	Division of chapters	17
1.6	Chapter summary	17

CHAPTER 2: OUTCOMES-BASED EDUCATION AND TRAINING LEGISLATION

2.1	ETD legislation	20
2.1.1	The South African Qualifications Authority Act, 58 of 1995	20
2.1.2	The National Qualifications Framework (NQF)	21
2.1.2.1	NQF structures and processes	25
2.1.3	The Skills Development Act	35
2.2	Summary of OBE essentials	38
2.3	Chapter summary	39

CHAPTER 3: THE RELATIONSHIP BETWEEN ROLES, COMPETENCIES AND OUTCOMES IN THE ETD FIELD

3.1	ETD Practices	42
3.2	ETD Facilitators	44
3.3	ETD Roles	50
3.4	ETD Competencies	53
3.5	ETD Outputs	66
3.6	ETD Outcomes	72
3.7	Context of ETD roles performed within the textile industry	77
3.8	Chapter summary	79

CHAPTER 4: EMPIRICAL STUDY

4.1	Study population	81
4.1.1	Population	81
4.1.2	Sample	82
4.2	Measuring battery	83
4.2.1	The data-collection method	83
4.2.2	Description of the data-collection method	83
4.2.3	Data-gathering process	85
4.2.4	Survey questionnaire completion procedures	85
4.3	Statistical analysis	86
4.4	Chapter summary	86

CHAPTER 5: RESULTS AND DISCUSSION

5.1	Descriptive statistics with regard to role level and role focus	87
5.1.1	Role level discussion	89
5.1.2	Role focus discussion	91
5.2	Descriptive statistics with regard to individual competencies and their future importance	93
5.2.1	Mean and standard deviations per competency	93
5.2.1.1	The current level of expertise of each competency	96
5.2.1.2	The level of future importance of each competency	100
5.2.2	Frequencies and percentages per competency	104
5.3	Reliability and construct validity statistics of roles and outcomes	119
5.4	Descriptive statistics reflecting mean and standard deviations of outcomes	121
5.5	Chapter summary	124

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1	Conclusions	125
6.1.1	Conclusions regarding the specific theoretical objectives	125
6.1.2	Conclusions regarding the specific empirical objectives	128
6.2	Limitations of the research	130
6.3	Recommendations	131
6.3.1	Recommendations to the CTFL SETA	131
6.3.2	Recommendations for future research	135

REFERENCES	136
-------------------	------------

APPENDIXES

Appendix A	:	Draft Unit Standards for Occupationally-directed ETD practices	140
Appendix B	:	Evidence of research request	160
Appendix C	:	Textile Industry Skills Audit (1997)	162
Appendix D	:	Respondents and companies participated in the sample	200
Appendix E	:	Survey questionnaire	203
Appendix F	:	Extract of minutes held on 7 August 2000	224
Appendix G	:	Summary of learning technology terminology	226
Appendix H	:	Development needs for ETD facilitators as identified in the empirical study	230

LIST OF TABLES

	Page
Table 1 : Principles of the NQF	24
Table 2 : ETD Practices across Sites	44
Table 3 : Roles of ETD Facilitators	51
Table 4 : Three broad ETD Roles	53
Table 5 : ETD Competencies	62
Table 6 : ETD outputs for the ETD field	66
Table 7 : Overall ETD Outcomes at NQF Levels 4, 5 and 6	76
Table 8 : Provincial Distribution of Companies	81
Table 9 : Company Size Statistics	82
Table 10 : Descriptive Statistics per Role Level and Focus	88
Table 11 : Respondents per Occupational Level	91
Table 12 : Descriptive Statistics per Competency	94
Table 13 : Descriptive Statistics of Current Level of Expertise and Importance Levels for Future Success per Competency	104
Table 14 : Reliability and Construct Validity of Roles and Outcomes	119
Table 15 : Descriptive Statistics Reflecting Means and Standard Deviations of Outcomes	121
Table 16 : Development Needs for 2001	133

LIST OF FIGURES

	Page
Figure 1 : Schematic outline of the NQF	22
Figure 2 : NQF structures	26
Figure 3 : OBE pillars	28
Figure 4 : Concepts linked to competence	30
Figure 5 : A Quality framework for learning	49
Figure 6 : Relationship between competence and performance	59
Figure 7 : Role level percentage pie chart	89
Figure 8 : Role focus percentage pie chart	91
Figure 9 : Development needs measurement model	132
Figure 10 : The practitioner development model	134

CHAPTER 1

INTRODUCTION

This dissertation is about the development of roles, competencies and outcomes for Education, Training and Development (ETD) facilitators in the textile industry. The industry has expressed an enormous need to research the requirements of outcomes-based education and training (OBE) and its implications for the development of the industry's ETD facilitators. A commitment to education, training and development is vital if the industry is going to expect high levels of skills development from individual companies. Most training takes place inside companies and they will need to upgrade the skills of their facilitators, trainers, mentors, coaches and assessors in developing and maintaining a learning culture in the industry's businesses. The development of roles, competencies and outcomes for ETD facilitators centers around the upgrading of training competence to higher levels of applied competence, so that the ETD activities employed in the industry add value in supporting learning through a set of roles in a wider range of expertise or performance outcomes areas.

In this chapter, the demarcation of the problem will be highlighted which will guide the research objectives to be achieved in the mini-dissertation.

1.1 PROBLEM STATEMENT

The World Competitiveness Yearbook (1996) ranked South Africa last out of 46 developing countries in terms of its human resources development performance and other labour market indicators. Our poor record in the field of education and training has been an important determinant of this.

People play a crucial role in an organisation's ability to produce products and services, and moreover, in a country's ability to improve productivity and economic growth. The role of human resources development is therefore essential, especially in a country like

South Africa in which its human resources are under-developed and the potential of people not realised (Tyers, 1995).

It is further evident that practitioners require a wide range of skills in order to play a pro-active role in human resource development (Meyer, 1999). Training and education should always be a means to an end. For an organisation this is generally greater effectiveness in meeting its objectives. For the individual it provides a basis for an improved quality of life (Babb, 1998; Meyer, 1995). The aim is to produce responsible adults with a practical approach to life. This will lead to the development of citizens who can contribute towards an efficient South Africa (Chetty, 1998).

Education, training and development (ETD) in South Africa took a new direction when a vision was developed by the National Training Board in 1994 to meet the country's education and training needs. The human resource development system envisaged was one in which there is an integrated approach to education, training and development to meet the economic and social needs of the country and the development needs of the individual. The aim is to contribute towards development targets in the national economic plan through a National Qualifications Framework (NQF) (Allie, 1997).

The objectives of the NQF are based on a system of credits and qualifications for learning outcomes achieved that will create an integrated purpose for learning and to remove unnecessary barriers between education and training; between learning and working; between learning in one place and learning in another place. The aim is further to facilitate access to and mobility and progression within education, training and career paths, improving the quality of all education and training, and getting rid of past unfair discrimination in education, training and employment opportunities. This should contribute to the full personal development of each learner and the social and economic development of the nation at large (Jerling, 1996; Olivier, 1998).

The establishment of structures of governance was necessary to enable the NQF to be implemented. In this regard a national accreditation and certification statutory authority – the South African Qualifications Authority (SAQA) – was established to oversee and

set up a coherent, integrated system of assessment, accreditation and registration of all national qualifications offered in South Africa. The SAQA structure further promulgated National Standards Bodies (NSBs) in twelve distinct fields of learning with the main objective to recommend the registration of unit standards and qualifications to SAQA. Standard Generating Bodies (SGBs) are intended to generate, update and review unit standards in identified sub-fields and levels to the NSBs. Education and Training Quality Assurance Authorities (ETQAs) are being established to accredit providers, promote quality of learning, evaluate assessment/moderation, register assessors, certify learners and recommend new standards/qualification to NSBs (extract from the South African Qualification Act, 58 of 1995).

All qualifications in an integrated-based system forming the NQF framework would involve various types of unit standards to be developed in various contexts to make up a qualification at various levels. This would allow learners to acquire applied competence, understood to be the learner's demonstrated ability to perform a set of tasks with understanding and reflexivity (Norms and Standards Report, 1997).

In addition, the Skills Development Act, 97 of 1998, was established with the purpose of developing the skills of the country's workforce and to increase the levels of investment in education and training. The purpose was also to encourage employers to use the workplace as an active learning environment to provide opportunities for employees to acquire new skills through learnerships and other training programmes. The objectives of the Act were to be achieved by means of various structures and interventions. The National Skills Authority (NSA) was to implement a national skill development policy and strategies.

The Sector Education and Training Authorities (SETAs) are intended to implement sector skills plans (SSPs), promote and register learnerships, perform education and training quality assurance (ETQA) functions, and receive and allocate skills development levies. SETAs would also liaise with the NSA on skills strategies and sector skill plans (SSPs) based on individual workplace skills plans (WSPs) submitted by companies within its scope.

The skills development levy came into effect in April 2000 with an amount of 0,5% of the payroll to be paid by employers to the National Skills Fund (NSF). The amount is to be increased to 1% in April 2001. In order to qualify for refunds of the total levy payable, individual companies must submit WSPs to the relevant SETA. Various grant schemes have been established by the Skills Development Levies Act, 9 of 1999 to ensure that companies appoint skills development facilitators, develop WSPs, implement these skills plans and report thereon periodically, commencing 1 April 2000 (Extract from Skills Development Act, 97 of 1998).

The key to the acceptability of ETD therefore lies in providing credible end results or outcomes. All learning provisions must be aligned towards unit standards and all learners need to be assessed against unit standards, the focus of outcomes-based education (OBE). The latter requires the development of a new kind of ETD practitioner/facilitator to meet the specific demands of South Africa in different contexts (schools, universities and organisations) and ETD practices (Hallendorff, 1999).

These practices will differ as to their purpose, content areas, activities and resources, places and learner groups across the ETD field. The people undertaking such practices are known as ETD practitioners/facilitators. There is widespread recognition and acceptance of the fact that ETD roles, competencies and outcomes are shared amongst ETD facilitators (ETD Practices Project, 1998).

It therefore appears possible to use a generic set of roles to describe practices across the ETD spectrum. ETD roles mainly fit into three broad categories – teaching, design and management roles. These roles include those of administrator, assessor, evaluator, facilitator, designer, needs analyst, strategist, change agent and manager (Erasmus & van Dyk, 1999; ETD Practices Project, 1998).

Within the framework of ETD legislation and practices the textile industry has expressed the need to upgrade the training competence of ETD facilitators at various levels (instructor, training official, senior training official and manager). The objective

is to build capacity to deliver and align training provision and assessment practices towards and against the recently developed Textile Qualification Standards (TQF). These standards are currently awaiting registration at SAQA for employees within the industry (DC Bowen, Personal Communication, February 2000).

More specifically, the set of roles, competencies and outcomes of existing ETD facilitators within the industry need to be surveyed. This will provide a static snapshot of where the ETD profession is today as well as the level of mastery at which these various roles are practised at supportive, operational, co-ordinating, implementation and strategic levels within individual textile companies.

It is therefore of vital importance to the industry to know what ETD facilitators can do as a result of the practices employed, whether directly or indirectly, to promote or support learning and to ascertain their ability to perform to standards. The analysis of what skills, knowledge and understanding facilitators need to achieve the purpose of the various roles to the required standard of performance is a critical step in establishing ETD standards in the industry. These standards are a key component of the natural shift towards outcomes-based education (OBE). It is proposed that the information is to be obtained through a structured survey questionnaire within the industry.

This information should accordingly be analysed and the results included in the Sector Skills Plan of the textile chamber of the newly registered Clothing, Textiles, Footwear and Leather Authority (CTFL SETA) for action (DC Bowen, personal communication, February 2000).

Based on the problem statement of this research, the following research questions are formulated:

- How is outcome-based education and training (OBE) conceptualised within ETD legislation?

- What is the relationship between the roles, competencies and outcomes in the ETD field?
- What are the sets of roles, the level of competency/expertise and outcomes of ETD facilitators in the textile industry?
- What are the perceptions of interested parties regarding the importance of a range of competencies for future success in the various ETD roles?

It is hoped that the results of the last two research questions would assist the industry in developing specific action plans to address the development and upgrading of training competence more professionally.

1.2 RESEARCH OBJECTIVES

The objectives of the research incorporate a general aim and specific objectives:

1.2.1 General aim

The general aim of this research is to develop the roles, competencies and outcomes of ETD facilitators.

1.2.2 Specific objectives

The specific objectives of this study are to:

- Conceptualise outcome-based education and training from the literature.
- Determine the relationship between the roles, competencies and outcomes in the ETD field.

- Identify the roles, the level of competencies and outcomes of ETD facilitators in the textile industry.
- Identify skills development priorities for ETD facilitators in the textile industry for the period 2001 to 2004.

1.3 RESEARCH METHOD

The research method incorporates a literature review and an empirical study.

1.3.1 Literature review

The literature review focuses on the concepts and terminology associated with outcomes-based education and the ETD legislative framework which must support all learning processes aimed at learning outcomes.

1.3.2 Empirical study

The empirical study includes the following aspects:

- A description of the relationship between roles, competencies and outcomes of ETD facilitators as foundation for the structuring and compilation of a survey questionnaire.
- The compilation of a structured survey questionnaire, the identification of the sample group, analysing of the surveyed data, the reporting of results and recommendations for future research and action.

1.3.2.1 Research design

A survey design (Huysamen, 1993) is used in this research comprising a structured survey questionnaire. The research is intended to focus on the study of relationships between two or more variables without any planned interventions. Individuals in the sample group are to be measured in two or more variables at a specified time in order to determine the relationship between surveyed information. The survey design can be described as a cross-sectional design, where information collected from the sample is used to describe the population at that point in time (Shaugnessy & Zechmeister, 1997).

1.3.2.2 Study population

As the need of the research was identified by the Textile Industry Training Board (TITB) on behalf of the industry, a representative sample, as directed by the TITB, is used to determine the study population. A total of 34 individual companies participate in the survey, some companies having a Human Resource Development Department ranging from one to five facilitators involved in ETD practices, while others employ ETD consultants on an outsourced basis. The TITB provided assistance in disseminating the range of survey questionnaires to the identified companies and the retrieval of responses respectively.

1.3.2.3 Measuring battery

A structured survey questionnaire is used to determine roles, competencies and outcomes of ETD facilitators in a sample of textile companies as performed at different competency and outcomes levels. The roles, competencies and outcomes, as identified in the ETD Practices Project of 1998, and similarly within the American Society for Training and Development (ASTD) of 1998, as well as the draft Unit Standards for ETD practitioners are used as basis to structure the survey content.

Determining internal consistency (alpha coefficients) and conducting a factor analysis are used to determine the reliability and validity of the results.

1.3.2.4 Data analysis

Statistical analysis is performed with the assistance of the SAS-programme for Windows 6.12 (SAS Institute, 1996). The descriptions and comparison of results are based on means, averages, standard deviations and frequencies.

1.4 GLOSSARY OF CONCEPTS AND TERMINOLOGY

A glossary of concepts and terminology which came along with the re-engineering of the outcomes-based learning system and now incorporated in ETD legislation, has been developed by the Occupation-directed Standards Generating Body for ETD facilitators as a reference framework, and is set out below.

Assessment	The process of measuring applied competence by collecting and interpreting evidence of such competence. Evidence may be collected through portfolios, simulations, workplace assessments or written and oral examinations. See also “Summative assessment” “Formative assessment” and “Integrative assessment”
-------------------	---

Assessment criteria	Detailed statements of what would count as evidence which would show that the applied competence described in a standard has in fact been achieved. They are also detailed statements of what would count as an acceptable assessment of the competence.
----------------------------	--

Competences	The competence to perform a particular role is sometimes referred to as a “competency” (the plural of which is “competences”). Thus facilitation, assessment, coaching and evaluation, are often referred to as “competences”.
Counselling	Counselling is intended to support learners through processes of dealing with psychosocial problems. Basic levels of counselling might include helping learners deal more effectively with stress or time management. More advanced levels might include helping learners to deal with grief or conflict resolution.
Credit	A credit is the value or weight assigned to a particular standard. It is measured in terms of “notional learning time” – i.e. the average amount of time an average learner would take to achieve the competence described in the standard. Credits are intended to ensure that learners achieve equivalent recognition for learning achievements regardless of the field in which they are learning.
Critical cross-field outcomes	Critical cross-field outcomes are those which all qualifications and standards should aim to promote. They describe the kinds of transformation the NQF is intended to achieve.
Design	Design is the process of deciding what should be learnt, how it should be learnt, how it should be assessed and who should teach.
Essential embedded knowledge	Essential embedded knowledge is that knowledge needed to apply competence effectively when doing anything

Education, Training and Development (ETD)	Education, Training and Development is the term used to describe the practices which directly or indirectly promote and support learning / teaching. Practices such as facilitation and coaching directly support learning. Learning is indirectly promoted or supported through practices such as designing learning materials or programmes, or managing learning institutions or programmes.
Education and Training Quality Assurance (ETQA)	Education and Training Quality Assurance bodies are responsible for monitoring and auditing achievements in terms of national standards and qualifications. Specific functions relating to the registration of national standards or qualifications are also allocated to ETQAs.
Evaluate	Evaluation is the process of making judgements about the success and failure of learning processes, materials and programme, policies and systems.
Facilitation	Facilitation is the process by which learners are moved from what they know to that which they do not know in a particular area of learning.
Formative assessment	Assessment which is used to support learners developmentally and to feed back into the teaching/learning process is called formative assessment.
Guidance	Guidance is the process by which learners are supported in making decisions about learning or career path options or in overcoming barriers to learning.
Integrative assessment	Integrative assessment is the process of assessing a qualification as a whole (not just as a sum of its parts).

Learning aids	Learning aids are materials and/or pieces of equipment which visually or aurally support the teaching/learning process. They include overhead transparencies and projectors, handouts, slides, flipcharts, and video and audio-recordings.
Learning event	Any planned interaction between two or more people in a particular learning context to enable the achievement of outcomes is a learning event. An ETD programme consists of a series of structured learning events.
Learning materials	See “Training materials”
Learning programme	A learning programme comprises of a series of learning activities/events that are intended to equip learners with the competence needed to fulfil a particular role. For example, a bricklaying course might be a programme; but a number of activities or events might make up such a programme.
Lifelong learning	Lifelong learning is a framework, which asserts that people learn both formally and informally, throughout their lives. This provides impetus for developing provision for adults after the traditional formative learning stages of life.
Managing	Managing education and training comprises planning and co-ordinating learning and assessment systems, both at micro and macro levels.

Media “Media” is the general term for the physical forms in which information and messages are conveyed. They include print, video, television and radio, the Internet etc. (This term can also be used to mean journalistic reportage, as in newspapers – but this is not the way it is being used here).

Methodology “Methodology” is often confused with “method”. A method is a set of steps or procedures, which are followed. A methodology includes an understanding of why these steps are followed and when and how to deviate from them.

This understanding may include a theory of competence (or a theory about the nature of what learners are learning); a theory of learning (or how learners acquire the competence); and a theory of practice (or how the activities of the practitioner help learners to acquire competence).

Moderation Moderation is the process of checking assessments to ensure that they have been fair, valid and reliable. The process ensures that practitioners are all interpreting standards in the same way, and that there is consistency across time and contexts.

Module A module is a discrete “chunk” of learning / teaching within a learning programme. It may have self-contained training materials; may be assessed in its own right; and may be taught as a unit.

Monitoring Monitoring is the process by which something is checked on an on-going basis.

Needs analysis	A need analysis is the process of investigating an individual, organisational and/or systemic context in order to provide a basis for planning a learning programme.
National Qualifications Framework (NQF)	The National Qualifications Framework in South Africa is a mechanism for transforming the education and training systems. It consists of standards and qualifications registered with the South African Qualifications Authority. The NQF and SAQA share features such as level descriptors.
Occupational field	An occupational field is an area in which a person works. Shipbuilding, nursing or ETD are all occupational fields. Many occupational fields cut across one another. For example, someone who trains nurses draws on expertise both from nursing and from ETD.
Outcomes, Specific Outcomes	An outcome is a detailed statement of what a person has to be able to do when they have learned what is intended in a standard or qualification.
Outcomes-based	Where learners are assessed on their competence (the “outcome” of a programme) rather than on which courses they attended and for how long. Providers design programmes “backwards” from outcomes (hence “outcomes-based”) rather than planning the outcomes based on the inputs.
Pilot	A Pilot process is when something it is being done for the first time, and is being used to test how well it works. It is usually on a smaller scale and is carefully monitored/evaluated, so that adjustment can be made before implementing the things on a larger more public scale.

Practitioner	In this context, a practitioner/facilitator is someone who is acquiring or practising the competence described in an ETD-related standard – i.e. he/she is acquiring (learning and being assessed) some of the competences of an ETD practitioner/facilitator.
Progression paths	Progression paths are the possibilities for movement across and through qualifications, learning programmes and careers.
Qualification	A qualification is a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning.
Quality assurance	Quality assurance is the process of ensuring that the quality (level, scope, nature) of the standards is achieved in practice, and that steps are taken to improve quality where problems are identified.
Reflexivity	Reflexivity is the process through which a person thinks about (reflects on) what he/she is doing and, as a result, may learn from his/her actions and possibly change how he/she acts in future.
Resources	Materials, for example books, videos, magazines, articles.
South African Qualifications Authority (SAQA)	The South African Qualifications Authority is the statutory body responsible for setting up and maintaining the National Qualifications Framework.

Scope	The scope of a piece of work describes the extent of it – i.e. how big, complicated, far-reaching it may be.
Self-directed learning	People engaged in self-directed learning take responsibility for directing what, how and when they will learn.
Sector Education and Training Authority (SETA)	A Sector Education and Training Authority is a body established in terms of the Skills Development Act to plan and regulate provision of education and training within a defined sector.
Simulation	Simulation is the demonstration of competence in an environment constructed to resemble an authentic workplace context.
Standard	A standard is a detailed description of a component of applied competence. It serves as a criterion against which somebody may be assessed for entering or exiting a learning programme, occupational level or profession.
Summative assessment	Assessment used to provide “snapshot” information about a learner’s level of competence at a given time, usually at the end of a learning programme, is referred to as “summative”
Target group	The learners for whom a programme has been developed. Target groups identified under the Skills Development Act include rural people, women and disabled people.

Techniques	Techniques are the technical ways in which something is done. They are different to methodologies in that they are the actual ways of doing something rather than the model or approach to the way of doing it. They can include an element of style or the way in which the technical thing is done.
Training materials	Training materials are the media, which support the practitioner in facilitating learning. Examples include manuals, notes, information sheets, posters, checklists, audio and videotapes.
Unit standard	Unit standards are statements of the outcomes to be achieved by an individual in order to obtain credit for the unit. They also include administrative and other information as prescribed in the format agreed by SAQA.

1.5 DIVISION OF CHAPTERS

In order to reach the goals of the research, this mini-dissertation consists of the following chapters:

- Chapter 2: Outcomes-based education and training legislation
- Chapter 3: The relationship between the roles, competencies and outcomes in the ETD field
- Chapter 4: Empirical study
- Chapter 5: Results and discussion
- Chapter 6: Conclusion and recommendations.

1.6 CHAPTER SUMMARY

In Chapter 1 the background to and motivation for the research are discussed, after which an outline of the problem statement is given. This is followed by the formulation of the general and specific research objectives. Thereafter the research method,

incorporating the literature review and empirical study, is described. Finally, a glossary of concepts and terminology regarding outcomes-based education and training is presented as well as information on the division of chapters.

In Chapter 2, the requirements of outcomes-based education and training (OBE) are described and discussed.

CHAPTER 2

OUTCOMES-BASED EDUCATION AND TRAINING LEGISLATION

Within a textile manufacturing context, there is general agreement that business must be internationally competitive for the industry to survive. Technology must be world class, education and training standards must ensure that knowledge, skills and attitudes match – or exceed – those of our competitor countries, while the need to manufacture products of acceptable quality at a competitive price is taken as given (Textile Topics, 1997).

The realisation of competencies, knowledge, value and innovative potential of employees within an organisation will be paramount for textile companies to reposition themselves in the global context. In order to achieve this challenge, two specific ETD strategic aims must be accomplished (D.C. Bowen, personal communication, February 2000):

- The alignment of companies with the implementation of ETD legislation, which regulates the training that takes place in South Africa.
- The development of high-calibre ETD facilitators at all levels in companies to educate, train or facilitate employees within the new ETD learning system regulated by legislation.

Within the framework of ETD legislation, this chapter will focus on outcomes-based education and training (OBE) legislation from the literature, its institutional framework and related processes. The success of the outcomes-based learning system will depend on developing and maintaining education and training standards. It is therefore essential that those involved in ETD practices of training, design of learning materials and human resources development understand the ways in which the legislative framework in the country is trying to support the outcomes-based learning process. The conceptualisation of the new ETD system or outcomes-based education and training (OBE) will not only assist textile companies to achieve the specific ETD strategies

indicated above, but will also provide the industry with opportunities to move towards a fully integrated approach to learning based on learning achievements.

2.1 ETD LEGISLATION

South Africa instituted a new education and training dispensation, of which the South African Qualifications Authority (SQAQ), the National Standard Bodies (NSBs), the Sector Education and Training Authorities (SETAs) and Education and Training Quality Assurance (ETQAs) are the core drivers (Olivier, 1998). To understand how to educate, train or facilitate outcomes-based education and training, ETD practitioners must familiarise themselves with concepts and terminology which came along with the re-engineering of the learning system and now incorporated in ETD legislation, structures and processes. Only education and training that are based on the achievement of outcomes will be recognised by the new learning system, called outcomes-based education and training (OBE). The primary aim is to build South Africa into an international role-player through enhancement of a culture of lifelong learning (Olivier, 1998).

At the national level, developing human resources is the most important means that any country, business, or government department should capitalise on, not only to enhance economic growth but also to provide the much needed advancement of its people (Olivier, 1998). At organisational level, the purpose of the human resources development (HRD) function is to fulfil a leadership role in the implementation of the company's vision by developing a comprehensive and creative human resources framework that enables the acquiring of competencies, performance improvement and increased profitability (Rieger, 1995).

2.1.1 The South African Qualifications Authority Act, 58 of 1995

The SAQA Act was promulgated on 4 October 1995, with the following aim:

“To provide for the development and implementation of a National Qualifications Framework and for these purposes to establish the South African Qualifications Authority, and to provide for matters connected therewith” (Olivier, 1998, p. 4.)

The purpose of the South African Qualifications Act, 58 of 1995, is primarily to structure education and training in such a way that South Africa can become an international economic role-player (Meyer, 1999).

This act enables South Africa to develop its own integrated NQF accompanied by a supporting quality assurance system. The quality assurance system focuses on recognition of both newly obtained learning as well as prior learning achievements. The role of the quality assurance system is to ensure that credits, unit standards and qualifications comply at all levels with national and international standards, and obtained by learners in compliance with set standards (Hallendorff, 1999).

In order to meet the challenges of the future and compete within the global economy, industries need to ensure that their most important resource, humans, are equipped with the knowledge and skills required to fulfil the industry’s purpose. Before industries embark on extensive development and delivery of training programmes, they need to carefully analyse and articulate what skills and knowledge they require within the industry, and the standard of performance expected from individuals such that the purposes of the industry will be met (Hallendorff, 1999).

Having set the standards for that industry, it is up to the industry to ensure that people perform at the standards required through on-going assessment of performance, and provide the sort of training that enables people to meet those standards (Hallendorff, 1999).

2.1.2 The National Qualifications Framework (NQF)

The development of the National Qualifications Framework (NQF) promotes an outcomes-based approach to education and training. These outcomes are described in

documents called unit standards which form the building blocks of the NQF. By linking to the NQF, the imperatives of industry are supported, the needs of individual learners are met, and the competitiveness of the nation is enhanced (Hallendorff, 1999).

The NQF intends to be instrumental in ensuring that qualifications, which are wedged into the NQF, promote an integrated approach to education and training. Each standard and qualification which meets the requirements of the NQF is registered by SAQA and identified by a unique description (Olivier, 1998).

The NQF consists of a framework with eight levels and three identified bands. "Level" refers to the level of qualification to which the unit standards contribute. The first is the General Education and Training (GET) with two sub-sectors, namely formal schooling and Adult Basic Education, culminating in Level 1. The second band is the Further Education and Training (FET) comprising levels 2 to 4. Here a large numbers of sectors can provide education and training. The third band is the Higher Education and Training band (HET) and comprises levels 5 to 8 (Erasmus & Van Dyk, 1999). Below, Figure 1 gives a schematic outline of what the NQF looks like.

The National Qualifications Framework		
NQF Level	Band	Types of Qualifications and Certificates
HET Band		
8	Higher Education And Training Band	Doctorates, Further Research degrees.
7		Higher Degrees, Professional Qualifications.
6		First Degrees, Higher Diplomas
5		Diplomas, Occupational Certificates.
FET Band		
4	Further Education And Training Band	School/ College / Trade Certificates Mix of units from all
3		School/ College / Trade Certificates Mix of units from all
2		School/ College / Trade Certificates Mix of units from all
1	GET Band	
General Education And Training Band	Std 7 / Grd 9 (10 years) Std 5 / Grd 7 (8 years) Std 3 / Grd 5 (6 years) Std 1 / Grd 3 (4 years)	ABET Level 4 ABET Level 3 ABET Level 2 ABET Level 1

Figure 1: Schematic outline of the NQF

As the NQF is based on a credit system for achieving learning outcomes, it requires a new mindset among education and training providers. It also affects the way learners in different contexts learn and continue to learn.

According to Phillips (1997, p.6), the benefits of the NQF can be described as follows:

- It promotes a consistent approach to education and training with a focus on meeting quality standards and practices.
- There is scope for industry, the professions and formal education to set their own specific standards but with the emphasis on national qualifications attainment.
- It encourages industries which have never offered national training opportunities to do so, as training provision will lead to nationally-based qualifications.
- Learning takes place in the workplace, at tertiary institutions, secondary schools and in private training establishments.
- The training provision industry is better equipped to compete on the international market, and overseas workers are able to have their qualifications assessed for equivalence against South African qualifications registered with the NQF.
- Individual attainment in the form of detailed and credible reporting will be available to all stakeholders.

A set of principles is, however, required to underpin qualifications and for the NQF to provide the benefits as stated above. These principles are (National Training Board, 1994, p. 8-11) (See Table 1):

Table 1

Principles of the NQF

Principles	Definition
Integration	Forms part of a system of human resources development which provides for the establishment of a unifying approach to ETD.
Relevance	Be and remain responsive to nationally development needs.
Credibility	Has national and international value and acceptance
Coherence	Works within a consistent framework of principles and certification
Flexibility	Allows for multiple pathways to ensure same learning ends.
Standards	Be expressed in terms of a nationally agreed framework and internationally acceptable outcomes.
Legitimacy	Provides for the participation of all stakeholders in the planning and co-ordination of standards and qualifications.
Access	Provides ease of entry to appropriate levels of education and training for all prospective learners in a manner which facilitates progression.
Articulation	Provides to learners, on successful completion of accredited prerequisites, opportunity to move between components of the delivery system.
Progression	Ensures that the framework of qualifications permits individuals to move through the levels of national qualifications via different appropriate combinations of the components of the delivery system.
Portability	Enables learners to transfer their credits or qualifications from one learning institution and/or employer to another
Recognition of prior learning	Through assessment, gives credit to learning which has already been acquired in different ways, e.g. through life experience.
Guidance of learners	Provides for the counselling of learners by specially trained individuals who meet nationally recognised standards for ETD facilitators/practitioners.

The correct understanding of the what (content) and the how (process) envisaged with the NQF is crucial to its successful development and implementation. The “what” deals with the nature and extent of the NQF levels, the character, calibration and building of qualifications and the establishment of unit standards and their clustering in credits. The “how” deals with the process of involving stakeholders. This is taken care of within the establishment of National Standard Bodies (NSBs), Standard-generating Bodies (SGBs), and Education and Training Quality Assurance Bodies (ETQAs). (Olivier, 1998).

2.1.2.1 NQF structures and processes

The SAQA Act requires that a wide band of constituencies have to be represented in the process of setting standards in order to integrate the goals for education and training provision with the social and economic agendas of these constituencies. The framework itself has to link diverse areas of provision across ETD; across basic, further and higher levels of education and training; and in formal, non-formal and informal contexts (Meyer, 1999).

Figure 2 (adapted from SAQA, 1999) summarises the NQF structures and processes that SAQA is empowered to establish for the two strands of its activities (Meyer, 1999):

- Developing the criteria against which learners will be assessed in obtaining qualifications (called “standard setting”); and
- Ensuring that qualifications are not issued unless these criteria have been met (called “quality assurance”).

South African Qualifications Authority (SAQA)		
• Statutory body appointed by the Minister of Education in consultation with the Minister of Labour • National education and training stakeholder membership • Reports to Parliament • Responsible for overseeing the development and implementation of the NQF.		
Standard Setting		Quality Assurance
• Structured into twelve organising fields of learning NATIONAL STANDARDS BODIES (NSBs) • National stakeholder standards setting bodies with equitable representation through six stakeholder categories. • Accountable to constituencies and through the Authority to the two ministers and Parliament for development of standards (units and qualifications). • Demarcate fields into sub-fields. • Responsible for recommending standards (units and qualifications) to the Authority for registration on the National Qualifications Framework. • Responsible for ensuring that all standards consist of clear statements of learning outcomes and associated assessment criteria together with requisite moderation and accreditation criteria. • Responsible for ensuring the quality (relevance, credibility and legitimacy) of the standards recommended to the Authority. • Responsible for registering and, when necessary, establishing Standards Generating Bodies (SGBs) • Responsible for ensuring the review of registered standards and the development of standards setting processes where and when necessary. STANDARDS GENERATING BODIES (SGBs) • Representative of key education and training stakeholders in the sub-field. • Generate standards and qualifications in identified sub-fields and levels. • Update and review standards. • Recommend standards and qualifications to national standard bodies. • Recommend criteria for the registration of assessors and moderators or moderating bodies. • Perform other functions delegated by its NSB.	 N Q F Comprised of registered standards, units and qualifications at eight levels of learning	• Structured into three sectors: economic, social and education and training sub-system. • Organised across two bodies: accredited bodies (ETQAs) and accredited learning providers. • Decision-making structures to include national stakeholder representatives to ensure public accountability, relevance and credibility. ETQAs: • Accountable through SAQA to the two ministers and Parliament for the standards of learning achievements and provision in their area of primary focus • Responsible for assuring the quality of learning achievements within a specified context for registered standards (units and qualifications) chiefly through: a. Registration of assessors b. Accreditation of providers, and c. Quality management system. Providers • Accountable to ETQA – through primary focus – for management, development and delivery of learning programmes and services for which they are accredited. • Responsible for ensuring the quality of the learning experience according to the requirements of the registered standards and qualifications. • Responsible for recording, researching and reporting the outcomes and impact of their learning programmes and services. Moderating bodies • Appointed by SAQA according to NSB recommendations. • Responsible for ensuring that assessment of registered outcomes are fair, valid and reliable across the NQF.

Learners

Figure 2: NQF Structures (Adapted from SAQA, 1999)

In order to have a better understanding of certain key concepts incorporated in ETD legislation, an attempt will now be made to explain the concepts of outcomes-based education and training, applied competence, learning programme design, unit standards and assessment.

The South African government has taken a transformational approach to OBE, with a clear focus on critical outcomes that “will ensure that learners gain the skills, knowledge, and values that will allow them to contribute to their own success as well as to the success of their family, community and the nation as whole”. (Department of Education, 1997, p.10).

The starting point of OBE is the definition of agreed outcomes of learning. These outcomes of learning can be motivated as important in terms of factors such as their usefulness, their value to individuals and society, the demand for people with these skills and knowledge, and for people development. These outcomes can range from generic to highly specialised (Spady, 1994).

The shift to outcomes-based learning versus mainly content-based learning in the education system and competency-based learning in the training system is analogue to the total quality movement in business and manufacturing. In terms of outcomes-based learning, this means that learners accomplish more than remembering or mastering skills and knowledge (Olivier, 1998).

It also means that learners accomplish more than just producing or delivering outcomes which equal mastery of knowledge and skills without the competence to become involved in managing their own learning process, developing preparational steps, or doing interim and final assessments on processes and outcomes. The outcomes-based learning approach deviates from the conventional and traditional content-based education and training in the sense that it focuses on the mastering of processes linked to intended outcomes, as well as on mastery of knowledge and skills needed to achieve the outcome (Olivier, 1998).

Learning outcomes must be agreed upon by all stakeholders to meet the diverse needs of individuals and society, including business, tertiary institutions, cultural organisations and government. Once these outcomes have been agreed, two key roles emerge (Hallendorff, 1999):

- Learning programmes must be designed and implemented that enable learners to become competent relative to these outcomes.
- Appropriate assessment methods must be designed and implemented to determine whether learners have in fact reached these outcomes. Information gathered from such assessment activities will enable ETD facilitators to make decisions relative to future steps in the learning programme, ranging from certification to remedial teaching/training.

OBE can be considered to have three pillars that relate to each other in a particular way: (see Figure 3).

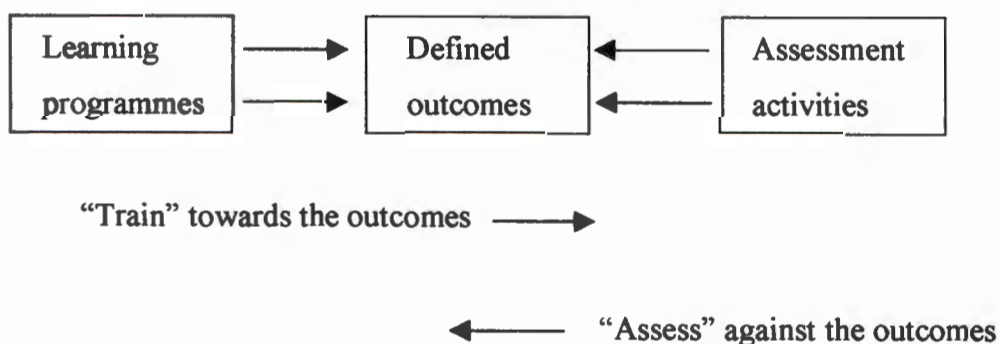


Figure 3: OBE pillars (Hallendorff, 1999)

The following deductions can be made based on Figure 3.

- **Learning programmes.** In outcomes-based learning programmes, the curriculum design process starts with the intended learning achievement, i.e. the outcomes.

This implies that learners must demonstrate the achievement of an outcome, as well as involvement in the learning processes.

Within the **education system**, Olivier (1998) advised that learning programmes serve as guides to direct learners towards achieving outcomes. The curriculum development process is based on identifying specific areas of learning. For each learning programme, a series of specific outcomes are subsequently formulated. These outcomes serve as the basis to establish what knowledge, skills and processes must be mastered as enabling objectives in order to achieve the outcomes.

Within the **training system**, training programmes, courses or unit standards will form the basis for qualifications. The training outcomes are derived from the job description and the knowledge and skills needed to achieve the outcomes. This means that the training programmes should be designed based on a thorough analysis of the inputs required to achieve certain learning outcomes. Input decisions need to take into account a host of factors such as the type of learners, nature of learning, prerequisite learning, sequence of learning, themes of learning, learning methods and media. The type of inputs might differ from one learning context to another, and for different individuals, and therefore ETD facilitators must keep uppermost in their mind the need to develop and implement the most appropriate inputs to achieve the defined outcomes (Hallendorff, 1999).

- **Defined outcomes.** According to the Norms and Standards Report (1997, p.58) the concept of an applied competence should be understood as the learner's demonstrated ability to perform a set of tasks with understanding and reflexivity. Applied competence is the overarching term for three inter-connected kinds of competence: practical, foundational and reflexive competence:
 - **Practical** competence is the demonstrated ability to perform a set of tasks.
 - **Foundational** competence is the demonstrated understanding of what others or learners are doing and why.

- **Reflexive** competence is the demonstrated ability to integrate performance with understanding so that people learn from their actions and are able to adapt to changes and unforeseen circumstances.

In implementing applied competence, the following concepts interlink in “competence” issues (See Figure 4):

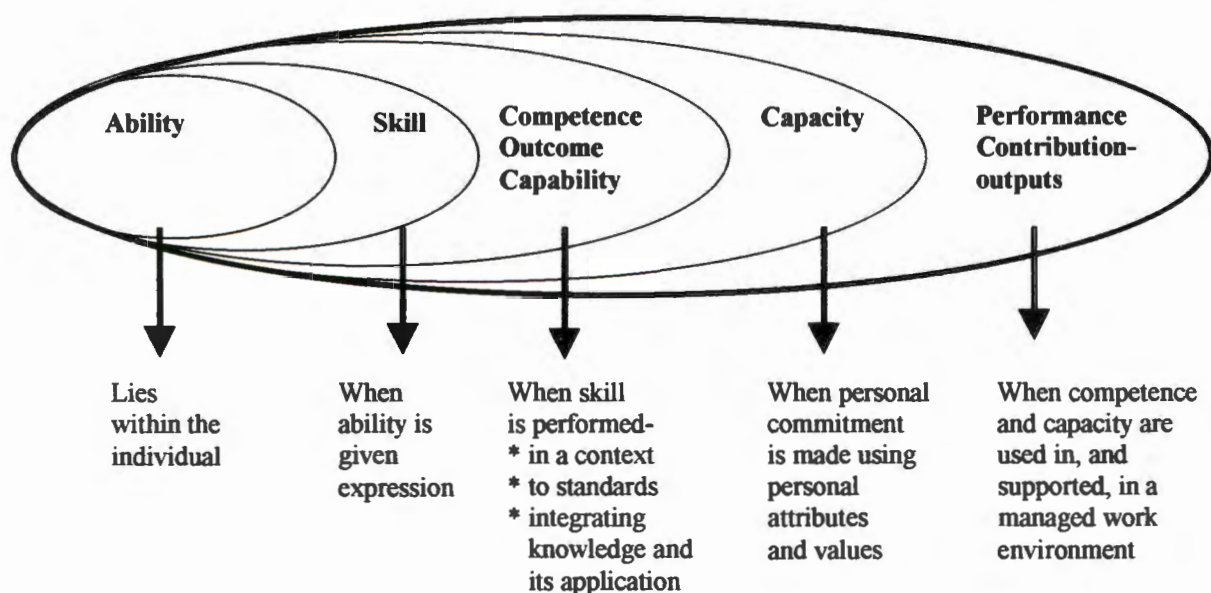


Figure 4: Concepts linked to competence (Bellis, 1999, p.19)

In this new approach, academic, occupational and professional requirements are no longer stated in terms of the input of content or the time taken. Instead, the emphasis is on the acquisition of applied competence, which is described, using outcomes. In this scenario, an academic qualification is no longer evaluated in terms of years, but in terms of exit level outcomes which define the applied competence to be achieved by the successful learner. It focuses no longer on an input approach (what is to be taught), but rather on an output approach which emphasises what the learner can do. The value of an academic qualification is no longer determined by a specified syllabus, but by the value of the learning outcomes achieved (Hallendorff, 1999).

The actual mix and balance between the three dimensions of applied competence vary according to the purpose of the qualification. One qualification may require a greater degree of practical competence while another a greater degree of foundational competencies (Norms and Standards Report, 1997, p.59). Academic and occupational dimensions of an outcome are similar to the distinction between theory (knowing that) and practice (knowing how). In an outcomes-based approach theory and practice should be integrated as far as possible (Norms and Standards Report, 1997, p.61).

The defined outcomes are described in documents called **unit standards**, and these unit standards are registered on the NQF at the appropriate levels. Unit standards are statements of the outcomes to be achieved by an individual in order to obtain credit for the unit. They also include administrative and other information as prescribed in the format agreed by SAQA (Hallendorff, 1999). A unit standard must describe the following (Phillips, 1997):

- Overall outcomes (a coherent area of applied competence).
- Specific outcomes (describe what the individual must be able to do).
- Assessment criteria (identify the essential evidence required of an individual to prove that a specific outcome has been achieved).
- Range statements (set the parameters on the variety of situations and circumstances in which a candidate is expected to perform; it stipulates the breadth of achievement for the outcome).
- Critical cross-field outcomes (critical in that they support each specific outcome).

It must be emphasised that unit standards describe what people should **be capable of** and are not descriptions of work processes or the content or procedure or methodology of learning, nor do they replace curriculum documents and guidelines. In the same way,

unit standards are not assessment activities nor do they replace assessment documents and guidelines. Unit standards do however, inform learning programme developers of what the outcomes of learning ought to be, and inform assessors as to what must be assessed and the quality of evidence (or performance) required (Hallendorff, 1999).

More importantly, however, is that SAQA has designed **critical outcomes** which must apply to all learning. Olivier et al. (1998) state that the aim of the critical outcomes is to direct educational and training activities towards the development of the learners within a social and economic environment. This means that these critical outcomes are intended to promote the skills necessary to enhance South Africa's overall educational and economic competitiveness and support the convergence of general and vocational education, training and development. The following seven critical outcomes should be embedded in all qualifications (Norms and Standards Report, 1997, p. 72).

1. Identify and solve problems by using creative and critical thinking.
2. Work effectively with others in a team, group, organisation and community.
3. Organise and manage oneself and one's activities responsibly and effectively.
4. Collect, analyse, organise and critically evaluate information.
5. Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasions.
6. Use science and technology effectively and critically, showing responsibility towards the environment and the health of others.
7. Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

Finally, a planned combination of learning outcomes or unit standards must lead towards a qualification, supported by evidence of achievement of outcomes and range of credits and other requirements, as may be determined, at a specific level of the NQF (Olivier, 1998, p. 9).

The Norms and Standards Report (1997, p.75) indicated that the purposes of a qualification can be constructed and shaped through outcomes in line with the following principles:

1. Outcomes to reflect academic and occupational dimensions.
2. Outcomes to be achieved at different levels of applied competence.
3. Outcomes to integrate knowledge, skills and values.
4. Outcomes to be clustered into units of learning which promote portability, flexibility, breadth and depth.
5. Outcomes must be assessed using a variety of assessment methods and techniques in an integrated manner.

In constructing the Textile Qualifications Framework, each qualification contained three different categories of standards (D C Bowen, Personal communication, March 2000).

- A **fundamental** category which contains standards describing the competence needed to undertake the education or training reflected in the qualification as a whole, e.g. numeracy and literacy.
- A **core** category which contains compulsory standards which describe the competence that is contextually relevant to the qualification, e.g. compliance to safety and health.
- An **elective** category which contains options from which a choice may be made to ensure that the purpose of the qualification is achieved, e.g. maintain machine processes in either weaving, knitting; dyeing or spinning.

The SAQA Act has assigned each qualification a credit value (Meyer, 1999):

- **National Certificates** are required to contain standards with a credit value totalling 120 (=1200 notional learning hours)
- **National Diplomas** are required to contain standards with a credit value totalling 240 (=2400 notional learning hours)

- **National First Degrees** are required to contain standards with a credit value totalling 360 (=3600 notional learning hours)

Not all standards in each qualification need to be at the same level, but in each case the majority should be at or above the level of the qualification.

- **Assessment activities.** If one is serious about enabling learners to demonstrate the outcomes to the required standard, it follows that one needs to measure their performance to find out whether they have in fact reached these end points, whether they meet the standard of performance required, and if not, how far away they are from meeting the standard.

Based on the information derived from such assessment activities, one can either give recognition to successful learners and allow them to proceed along the learning pathway, or else modify the learning activities in such a way to enable unsuccessful learners to reach the end-points successfully (Hallendorff, 1999).

In brief, the assessment process unfolds as follows:

- The assessor examines the documents describing the learning outcomes to see what must be assessed.
- Based on what is to be assessed, the assessor either considers naturally occurring evidence or designs assessment activities that will enable him/her to gather evidence about the learner's ability relative to the specific outcome/s being assessed.
- During assessment, the learners produce evidence of their ability.
- The assessor compares the quality of evidence produced by the learner to the standard of evidence required, and forms an assessment judgement (Hallendorff, 1999).

2.1.3 The Skills Development Act

The **vision** of the Skills Development Act 97 of 1998 is viewed as an integrated skills development system which promotes economic and employment growth and social development through a focus on education, training and employment services. (Meyer, 1999).

The **core** strategy focus on an enabling environment for expanded strategic investment in skills development through an institutional framework which must devise and implement national sector and workplace strategies to develop and uplift the skills-base of the South African workforce. The above strategies must integrate with those strategies contemplated within the NQF and SAQA (Meyer, 1999).

According to Meyer (1999) the **purpose** of the Act can be summarised as follows:

- The development of skills of workers which can lead to the improvement of the quality of life of workers, their prospects of work and labour mobility; the improvement of productivity in the workplace and the competitiveness of employers, to promote self-employment, and the improvement in the delivery of social services.
- To increase the levels of investment in education and training in the labour market and to improve the return on that investment.
- To encourage employers to use the workplace as an active learning environment which provide employees with the opportunities to acquire new skills; provide opportunities for new entrants to the labour market to gain work experience, and to employ persons who find it difficult to be employed.
- To encourage workers to participate in learnerships and other training programmes.

- To improve the employment prospects of persons previously disadvantaged by unfair discrimination and to redress those disadvantages through training and education.
- To assist work seekers to find work; retrenched workers to re-enter the labour market; to assist employers to find qualified employees, and to provide and regulate employment services.

The above purposes are to be achieved by the establishment of an institutional and financial framework comprising the six key components listed below (Meyer, 1999, pp. 46-59):

- **The National Skill Authority (NSA).** The Authority is to provide for national co-ordination in the implementation of a national skills development policy and strategy.
- **Sector Education and Training Authorities (SETAs).** The Government has established SETAs in 27 economic sectors who will be responsible for the promotion and implementation of sector skills plan, learnerships, quality assurance functions, labour market research, skills audits, registration of workplace skills plans, accreditation of providers and assessors, and the promotion of partnership between public and private interests, as well as the administering of training claim grants for approved training and skills development within their areas of jurisdiction.
- **Education and Training Quality Assurance Bodies (ETQAs).** Each SETA can also register as an ETQA in accordance with the requirements set out by SAQA. The ETQAs have the responsibility to: accredit constituent providers; promote quality amongst providers, monitor provision among providers; evaluate assessment and moderation activities amongst providers; certificate learners; recommend standards and qualifications to NSBs; and submit reports to SAQA.

- **Learnership system and skill programmes.** A key focus of the SETAs is to establish a system of learnerships and skills programmes leading to occupationally based qualifications registered on the NQF, or credits towards such qualifications. Learnership agreements will be applicable to those not yet employed; unemployed persons, those who qualify for subsidised learning; and those learners in employment. The structured learning part of a learnership must include the unit standard categories required to make up a qualification, which comprise of the fundamental, core and elective standards. The main advantage of the learnership system is that it extends the traditional apprenticeship system.
- **Skills Development Planning Unit (SDPU).** The Act makes provision for the establishment of an institution situated within the Department of Labour with responsibility to research and analyse skills development needs for South Africa as a whole, each economic sector and government departments; to assist in the formulation of a long-term national skills development strategy; to assist SETAs in the development of coherent skills development plans; and to provide information on skills trends to all the role players in the skills development strategy.
- **Employment services.** A new form of employment services is envisaged with the Department of Labour aiming to upgrade existing and establishing new labour centres to register work-seekers, vacancies and work opportunities. It will also assist prescribed categories of persons to enter special education and training programmes and provide information about careers and opportunities.
- **The funding of skills development.** The implementation of the skills development strategy is financed through a levy-financing system embodied within the Skills Development Levies Act (published in Government Gazette No. 406 (19984) of 30 April 1999), donations from local and overseas donors, and general government revenues. From 1 April 2000 to 31 March 2001, employers will be liable to pay a levy of 0,5% of the total payroll to the South African Revenue Services which is in turn paid into the National Revenue Fund. From this fund, 20 percent in respect of a SETA is paid to the National Skills Fund (NSF), and 80 percent of the levies to the

relevant SETA. From 1 April 2001 onwards the levy will be doubled to 1% of the total payroll.

2.2 SUMMARY OF OBE ESSENTIALS

In summary, the key essentials of OBE can be stated as follows (Janse van Rensburg, 1999):

- The achievement of outcomes plays a key role in the execution of the new education and training system.
- The focus of outcomes-based teaching and learning is on what learners know and can do at the end of their learning experience.
- The outcomes guide the teaching and learning process, as well as the assessment of learner achievement, during and after the learning experience.
- The outcomes provide a means of assuring the quality of education and training at the end of the phases and form the basis for assessment of applied competence.
- Critical outcomes relate to the broader intended results of ETD, while specific outcomes are linked to a particular context or to a learning area.
- The development of an outcomes-based curriculum is a co-operative, collaborative effort which includes a broad spectrum of groups and individuals involved in ETD.
- Outcomes are recognised as national outcomes and apply to all learners in the country, and are future-orientated.
- Any programme of learning should assist learners to reflect on and explore a variety of strategies to learn more effectively; participate as responsible citizens in the life of local, national and global communities; being culturally and aesthetically sensitive across a range of social contexts; explore education, learning and career opportunities; and develop entrepreneurial opportunities (SAQA, 1999, p. 10).
- Learning areas, i.e. language, literacy and communication, are the domains through which learners in the GET, FET and HET bands should experience a balanced curriculum. These learning areas serve as a sound basis for developing learnerships or skills programmes within organisations.

- Learning programmes are to include, inter alia, critical outcomes, specific outcomes, assessment criteria, range statements, performance indicators and notional time.
- The assessment criteria provide the kind of evidence that the learner has to achieve to meet the specific outcome. They indicate in broad terms the observable processes and products of learning which serve as culminating demonstrations of the learner's achievements.
- Range statements are directly linked to the specific achievements indicated by the assessment criteria and describe the scope, depth, level of complexity and parameters of the achievement which the learner must master.
- A unit standard sets out the specific performance that is needed by learners – what they know and are able to do. It stipulates the level of quality, scope of performance and how the unit standard will be assessed. They are nationally agreed and internationally comparable statements of outcomes and are registered on the NQF at a defined level.

2.3 CHAPTER SUMMARY

From the above, it is clear that the new outcomes-based education and training approach to be implemented in South Africa is a definite shift from a curriculum where content was the main component, to a curriculum where the achievement of critical and specific outcomes is the driving force. It is also clear that ETD facilitators should ensure that they are familiar with these new trends to enable them to contribute to the vision of setting a platform for lifelong learning, not only for the learners but also for themselves in the different ETD roles, the required competencies to enact these roles, as well as the outcomes to be achieved at different levels of applied competence.

Thereby the first research question has been answered and the first specific objective reached, namely to conceptualise the new ETD system or outcomes-based education and training.

Chapter 3 focuses on the relationship between roles, competencies and outcomes in the ETD field.

CHAPTER 3

THE RELATIONSHIP BETWEEN ROLES, COMPETENCIES AND OUTCOMES IN THE ETD FIELD

A global revolution is taking place in the field of workplace learning. It is driven by the requirements of the information explosion, increased globalisation, the changing nature of work and business, as well as changing learner needs and aspirations (Meyer, 1999). Increasingly, work and learning are becoming the same thing and a lifelong challenge and where organisational consciousness is required to create learning organisations (Tapscott, 1998). In addition, a range of internal and external forces is influencing organisational performance which should be internalised by South African organisations if they want to become competitive in the global world. Piskurich (1998) identified the following trends which will have an impact on the future roles, competencies and outcomes of ETD facilitators:

- Globalisation is forcing organisations to conduct business activities from a more external focus where international standards are increasingly becoming the norm. This will require the development of knowledge and skills to function effectively in a global business environment.
- Strategic human resources development (HRD) plans must be flexible enough to accommodate changes in the environment, giving rise to continued corporate restructuring, downsizing of HRD departments, a shift from traditional training to performance improvement interventions in the workplace, and the outsourcing of part or whole of the organisation's training activities.
- The transformation of organisations into learning organisations which will require new technology-based infrastructures that facilitate the sharing of corporate knowledge and the achievement and evaluation of integrated goals.

- An increasing need of organisations to make use of technology-based learning to facilitate the learning process. Technology such as multi-media, computer-based training, virtual classrooms, internet training and video-conferencing are being used.
- The development of managers to coach, empower and lead subordinates instead of the traditional requirements to plan, direct and control staff.
- The increasing importance of diversity training across cultures and managing the goals of employment equity.

Local trends are also shaping ETD, especially the focus on outcomes-based education and the development of an ETD practices model which concept was born through the formulation of a national training strategy for South Africa in 1993. It reads as follows: “A human resources development system in which there is an integrated approach to **education** and **training** which meets the economic and social needs of the country and the **development** needs of the individual” (NTSI Executive Summary, 1994, p. 2).

The words education (E), training (T) and development (D) have traditionally been viewed as being separate and different from another, despite their common focus on teaching and learning (ETD Practice project, 1997). The new ETD system, however, seeks to achieve a better integration between these three concepts. This understanding of ETD supports the idea of more systematic connections between education, training and development, without requiring ETD facilitators from different contexts to develop identical practices.

Within the framework of ETD legislation and ETD practices, it will be necessary to determine the relationship between the roles, competencies and outcomes of ETD facilitators in the ETD field. An attempt will be made to clarify this through examining the findings of the ETD Practice Project, 1998, and other research studies which focussed on the relationship between roles, competencies and outcomes of ETD facilitators across the ETD field.

3.1 ETD PRACTICES

According to the ETD Practices Project (1998), ETD is a term used to describe the practices, which directly or indirectly promote or support learning. Depending on the context (schools, universities or organisations), ETD practices will have a somewhat different purpose or goal in the relationship between the facilitator and the learner, the manner in which learning processes is structured and the focus on what is being taught and learnt.

ETD practices can be found in mainly three sites of practices reflected in the ETD acronym – education, training and development – seeing their traditional focus as formal education, public and private sector training, and social development work of the broadest kind (ETD Practices Project, 1997, pp. 16-17):

- The formal education category includes schools, technikons and universities, as well as specialised institutions developed by the private sector
- The public and private sector organisations' category includes all in-house education and training at whatever level and which are directed at occupational effectiveness
- The civil society category includes fundamental sites of knowledge transmission and acquisition as families, churches, cultural and sporting associations and political parties.

There also exist different ways of **organising** ETD practices. Within formal education, ETD is characterised by formal fields of knowledge for example science, mathematics, language and technology which are arranged in hierarchical relationships, from pre-school to technikons and universities. In the public and private sector organisation field, ETD is characterised by occupational areas, by the roles and tasks of the workplace, for example management, supervisors, artisans. In the social society category, the ubiquitous informal processes of knowledge transmission and acquisition

are focussed by forms of social intervention, welfarist or activist (ETD-Practices Project, February 1997, p. 19).

An important feature of the formal system is the **boundary** it constructs between itself and the other two ETD sites. Intellectual development within established curricular frameworks is protected through institutional authority to maintain such boundaries and its formative mission. However, such boundaries have been eroded or de-contextualised in large areas of the national schooling system. Education and training in the workplace are more functional and conceived of as serving organisational of enhanced productivity and efficiency and new kinds of learning are emerging, signalled by new valuations such as learning organisations. Within the informal sector, ETD practices are embedded under conditions of social mobilisation through mainly projects which require the deepest form of contextual awareness and relevance (ETD Practice Project, 1997, p. 19-20).

Within the formal sector, the **contractual conditions** between the institution and student are pedagogical in nature, which contrasts with workplace contractual conditions where the relationship between company and worker is economical in nature. In the informal sector the contractual conditions are associative in nature, being characterised as members of organisations such as churches and trade unions (ETD Practices Project, 1997, p. 24).

In the formal sector, **evaluation criteria** are largely formal, norm-referenced and in written form, and assesses knowledge acquisition. In the private sector, the evaluation criteria occur as part of performance appraisal activities in the workplace or as part of a course or module and is usually criterion-referenced. In the informal sector, the evaluation criteria focus on the extent of member participation in a project, and are therefore termed as commitment-referenced (ETD Practices Project, 1997, p. 31).

In the same report, the above cross-site differences between formal education, private/public sector organisations and civil society are highlighted, and are presented below in matrix form (see Table 2).

Table 2
ETD Practices across Sites

Category	Formal Education	Public / Private Sector Organisations	Civil Society / Informal Sector
1. Organising principle	Knowledge hierarchy	Occupational role	Project goal
2. Boundary conditions	Decontextualised	Functional	Embedded
3. Contractual conditions	Pedagogic (student)	Economic (worker)	Associative (member)
4. Evaluation criteria	Norm-referenced (acquisition)	Criterion-referenced (application)	Commitment-referenced (participation)
5. Evaluation mode	Examination	Performance	Undifferentiated
6. Evaluation indication	Course-based	Performance-based	Participation-based

3.2 ETD FACILITATORS

The term “ETD Facilitator or Practitioner” was developed to describe a broad range of people directly or indirectly involved in activities, which support learning. The term “facilitator” can be used interchangeably with the term “practitioner” and has the same meaning for the purpose of this research.

Within formal institutions education and training are both “core business” and “whole job”. ETD is not embedded as a component of some process of production in an organisation. Though the outcomes of schooling or university, for example, are judged by their access and exchange value in the market place, internal processes of schooling

or university are governed by criteria of successful (or unsuccessful) knowledge acquisition. The formal curriculum is the ETD production line. Within public and private organisations, by contrast, ETD is not “core business” and ETD roles are frequently not practised in full-time jobs. Both ETD “curriculum” and “facilitator” are embedded in more fundamental processes of production, such as management, labour relations or supervision (ETD-Practices Project, February 1997, p. 20).

Based on this distinction, very different forms of ETD career paths, qualification levels and professional identity have developed. Within the formal education system a long history of bureaucratisation has produced established professional categories as teacher, lecturer and professor. Such roles have generated formal rules for professional entry and a ladder for career progression and qualification ladders that relate in some way to these progression career paths.

Within the state and private organisation sector, the network of established career paths has not included an ETD path. With few exceptions, professional identity, has not resided in ETD roles, and a formal qualifications track to certify and qualify for such role performance has been lacking.

ETD identity within the three broad sites, institutional differences and boundaries are no less powerful in defining the forms ETD practices take. In formal education, teachers and lecturers inhabit insulated worlds in institutions like schools, technical colleges, nursing colleges, technikons and universities. In the formal sector, ETD identity remains defined primarily by the institution one works in, and secondarily by one what one teach / facilitate or whether one has moved from training to some level of management.

Professional identity in the workplace site has been described in terms of that which stress its embeddedness in production and its role in maximising the conditions of production. This has meant that ETD has had to meet productivity criteria absent in the formal sector and therefore that performance rather than knowledge indicators are prioritised. Increasingly, however, the reconceptualisation of productivity and its

innovative and therefore knowledge-based components on the one hand, and the worker-driven demand for formal recognition and development of submerged capacity on the other, is leading to new levels of ETD professionalising and specialisation, as well as new institutional forms and modes of ETD delivery. It is probable that the workplace, rather than the formal sector or the informal sector, will become the site for major ETD innovation and development over the next decade which has been prompted by the Skills Development Act. Hence the particular pressure on this sector for ETD recognition, qualification, quality appraisal and career opportunities for a range of ETD practices that are part role and part job in performance, as well in for those that may develop full-job status (ETD-Practices Project, 1997).

It appears, therefore, that there is a growing appreciation in the corporate sector, in particular, of the crucial role of training and knowledge acquisition in flexible and innovative work performance that is propelling human resource development into a new phase of specialisation, and of professionalisation.

The ETD Practices Project (1998) further identified that the various ETD practices must add value to learning. In this regard, ETD practitioners need to add value to their role performances, to their expertise and to their knowledge bases, i.e. achieving professionalism in ETD practice.

This means that whatever they **do** (facilitator, assessor, evaluator, learner support – referred to as ETD roles), they must do it to promote learning. Furthermore, the **expertise** of ETD practitioners must be strengthened or developed in the areas of occupational expertise within a manufacturing environment, expertise in facilitating learning and expertise in contextual understanding. Expertise is usually defined as “expert skill, knowledge and judgement” (ETD Practices Project, 1997).

In constructing the original ETD model, the National Training Board saw three forms of **expertise** as underpinning ETD facilitator performance (National Training Board, 1994).

- **Occupational** expertise, including subject expertise in formal settings; applied occupational competence or work experience, and a wider contextualisation of a particular knowledge area or field of work. In this context it refers to the judgement being made about what counts as worthy of being taught at a particular level and the ability to act on such judgement.
- **Contextual** understanding, including a broader understanding of society, of macro-political, economic and social issues, of sector or workplace contexts. In this context it refers to the judgement being made about what counts as relevant conditions or factors that impact on learning-facilitation relationship, and the ability to act on such judgements.
- **Expertise in ETD itself** (or pedagogical expertise), including the understanding of broader ETD issues, and understanding of learning processes, communicative competence in both verbal and written form, interpersonal and analytical skills. In this context it refers to the judgement being made what counts as learning and what counts as facilitation and assessment in particular contexts and the ability to act on such judgements.

None of these kinds of expertise operates independently of the others. When one examines the sources of expertise, a range of **knowledge bases** can be identified on which ETD practitioners draw when making the kinds of judgements described above.

These kinds of knowledge can be described as follows (ETD Practices Project, 1997).

- **Subject or work performance knowledge.** What one knows about the area in which learning facilitation occurs, i.e. warping processes.
- **Philosophical knowledge.** The grasping of the broader traditions and values of education, training and development and the ways they shape ETD practices and how these practices are understood.

- **Procedural knowledge.** The grasping of different and often contesting ways of facilitation and assessment.
- **Curriculum knowledge.** The grasping of what learners should know, how that relates to ways of learning and how it relates to other areas of learning contained within a learning programme, as well as to broader socio-economic goals.
- **Knowledge about learner contexts.** The grasping of different social rules (linguistic, cognitive, cultural, occupational) that shape the ways in which members of a society say, do, think, feel, value and learn.
- **Knowledge about institutional contexts.** The grasping of how different institutions or organisations function: Their values, their internal and external policies and ways of networking.
- **Knowledge about social and economic contexts.** The grasping of why societies function in the way they do: political, economic, technological and morally; how power is distributed; how these processes have developed historically and may be developing in the future.

These knowledge bases are crucial to the development of both specific and critical outcomes (in SAQA terms), as they provide the grounds for the choices, decisions or judgements a person makes when performing ETD activities. These knowledge bases are therefore the essential indicators of quality.

In putting together a quality framework for learning where we integrate the ETD roles, expertise and knowledge bases, it will look as follows (see Figure 5).

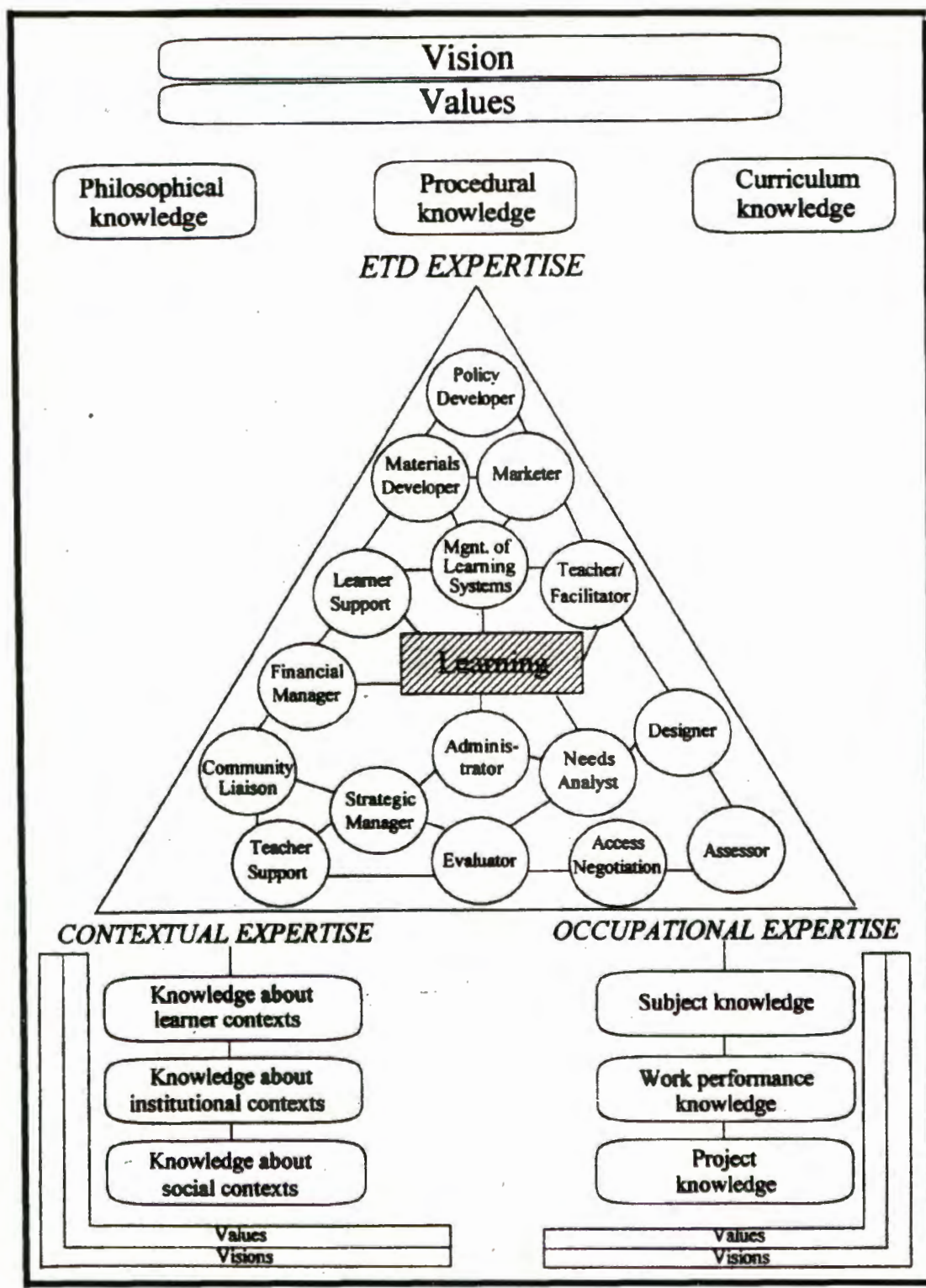


Figure 5: A quality framework for learning

Within the workplace, trainers are required to have a broad understanding not only of the specificities of a particular job task or workplace, but of issues and strategies at sectoral or industry level; of broader social, cultural and economic issues; of global

trends and their impact on South Africa as a whole and on their particular area of expertise.

Within the new ETD system, a person who undertakes ETD practices is known as an ETD facilitator. So even though people will continue to have identities as “trainers” or “teachers” or “educators” or “instructors” or “facilitators” or “lecturers” or “community workers”, this new title intends to signal an integrated approach to education, training and development as a future orientation. Within this context, the term refers to (ETD-Practices Project, 1998):

- Teachers in schools
- Trainers in industry or community development
- Principals and administrative staff of schools, colleges and higher education institutions
- Managers of educational organisations
- Human resource managers in industry
- Textbook writers
- Curriculum developers
- Specialised assessors
- Programme evaluators
- Education and training consultants.

3.3 ETD ROLES

Considerable research has been done in the description of ETD roles. From this it is evident that ETD facilitators require a wide range of skills in order to play a proactive role in ETD. The roles of ETD facilitators have been developed by the National Training Board (1994), and corresponds with the roles identified in Models for Excellence (1983). These roles are summarised in Table 3.

Table 3

 Roles of ETD Facilitators

ETD Role	Description
ETD Manager	Ensuring that the structured learning process, learning outcomes and assessment of outcomes are effective through co-ordination of ETD related roles / activities.
Needs Analyst	Identifying learning and development needs of both individuals and groups or organisation.
Learning Materials Developer	Developing learning materials that will assist facilitators and learners in achieving learning objectives.
Learning Experience Designer	Designing interventions in terms of outputs and outcomes, learning opportunities and delivery to enable learning.
Individual Learning Facilitator	Guiding interventions that enable learning needs to be satisfied.
Group Learning Facilitator	Guiding interventions that enable individuals or groups to learn in a group context.
Assessor	Assessing the competency status of individuals against agreed quality standards / outcomes, using outputs and outcomes as the basis for evidence.
Evaluator	Evaluating the impact of ETD in the effectiveness of individuals or organisations.
Administrator	Providing support and logistics back-up for the enablement of training.
Strategist	Formulating plans for training and development, organisation, policies and practices to accommodate their vision and mission.
Development Councillor	Supporting learners through processes of dealing with psycho-social problems and advice to learners on resources, study methods, learning pathways and organisational expectations.

Source: National Training Board (1994)

However, within the NQF structure, the roles identified above will be integrated in the three sites already discussed. More commonality between the practices will be shared regardless of whether one is a teacher, lecturer or trainer which support learning.

Some of the **common practices** are (ETD-Practices Project, 1998, p. 23):

- Facilitating a course (it directly helps learners to learn).
- Designing a learning experience (such as a lesson, a course, a curriculum).
- Developing learning materials (such as learning guides / materials / textbooks).
- Assessing learners (to see what difficulties they are having or whether they can be successfully apply what they have learnt).
- Managing a learning programme or institution (school or training college).
- Providing administrative support (such as keeping records).
- Evaluating learning programmes and providing guidance and counselling to learners.

There is widespread recognition and acceptance of the fact that basic role descriptions are shared amongst ETD facilitators. It appears possible to use a generic set of roles to describe practices across the entire ETD spectrum. It also appears possible that ETD facilitators can fulfil a combination of these roles, depending on the level of responsibility and size of the organisation. These roles are therefore interrelated and depend on one another in order to perform effective ETD practices (Meyer, 1999, p. 8).

In all sites the variety of ETD roles fit into three broad categories – teaching roles, design roles and management roles. (“Teaching” is used as a broad term that includes training, instructing, lecturing, facilitating, mentoring and demonstrating). While these roles sets are integrated in some contexts, they are separate in others (ETD Practices Project, 1997). As an example, in the area of assessment, you may find a person solely performing the role of assessor. This person will not teach learners or design the assessment tasks. However, in another instance you may find the same person

performing the role of facilitator, designer and assessor. The nature of the job will dictate the combination of roles (ETD Practices Project, 1997, p. 31).

Table 4 reflects the clustering of ETD roles within teaching, design and management.

Table 4
Three Broad ETD Roles

Teaching	Design	Management
Teacher / Facilitator	Needs analyst	Administrator
Assessor	Designer	Marketer
Learner support	Materials developer	Evaluator
	Policy developer`	Financial manager
		Manager of learning systems
		Strategic manager
		Access negotiation
		Community liaison
		Teacher support

Source: ETD-Practices Project (1997)

3.4 ETD COMPETENCIES

The concept of a “competency” or “a cluster of competencies” is increasingly viewed as an abstract commodity which has a tradable value and provides the basis for the competitiveness of nations, enterprises and individuals in the South African and global economy and world of work (Meyer, 1996).

According to Meyer (1996), competence is the outcome and the product of learning and within a rapid and changing world, the traditional paradigms of education and training are inadequate to effectively provide the required competencies.

Competence or competency can be defined and measured only through behaviour or performance, and based on the variety of contexts in which the term is used, it further suggests that in each context the meaning or connotation may differ. Some of the various areas of competency include (Meyer 1995, 1996, 1997):

- The core competency of the organisation in the context of strategy and organisational design. Core competency refers to that hidden capability which is unique to an organisation and which can be applied to a variety of product lines. Strategic competencies are those competencies required by an organisation simply to compete in the game, but which, if developed to a superior level, will provide significant benefit. Both provide the basis for organisational design and the continuous development of essential, focussed individual competencies.
- Competence-based qualifications as entrenched in the National Qualifications Framework (NQF), where learning outcomes or competency standards form the basis for a credit-based system of qualifications supporting an integrated approach to education, training and development. In this context, an organisation should construct competency models specific to its requirements and modify these on an ongoing basis as individual needs, technology or work practices changes over time and as opportunities for further skills formation arise. A competency model in this context refers to the combination of units of learning required for a particular job, function or profession as defined at any point. The process of outcomes analysis to define the required competencies is important. Within the textile industry, the approach is rather to analyse textile processes rather than jobs to identify competencies, thereby avoiding the trap of building inflexible competency boundaries around people and their work (D.C. Bowen, Personal Communication, August 2000).

The significance of occupational competency lies, in addition to the NQF, in the linkages to all other components of a performance management system, since it is at this level that attention is focussed on performance standards, assessment of performance and possible pressure to link skills / performance to pay. It is at this level that core and

strategic organisational competency requirements become defined and operationalised (Meyer, 1995).

- Individual generic competencies for the assessment of potential and managerial development and which form the basis of assessment and learning centre technology. The use of competency in this context grew largely out of attempts to define competencies underpinning effective management and where simulated situations and psychometric assessment techniques are used to assess performance against a set of defined competencies or dimensions (Meyer, 1996).

On the level of individual generic competencies and occupational competencies, there appears to be a continuum along which most definitions can be located.

As regards the **individual generic competencies**, they refer to kinds of competencies that are “attributive” in nature, meaning that they infer to some underlying behavioural competencies and characteristics as a prerequisite for required performance, for example drive, conceptual reasoning and persistence (Meyer, 1996).

Hereby the following two attribute competency definitions are offered:

- A job competency is an underlying characteristic of a person which results in effective and or superior performance in a job (Kemp cited in Spangenberg, 1990).
- A job competency is an underlying characteristic of a person in that it may be a motive, trait, skill, aspect of one’s self-image or social role, or a body of knowledge which he or she uses. The existence and possession of these characteristics may or may not be known to the person. In this sense, the characteristics may be unconscious aspects of the person (Boyatzis, 1982).

At the other end of the continuum are **performance-based approaches** to competence. From this somewhat behaviouristic perspective, competence is defined in terms of required performances. Therefore the need to define, understand and measure

underlying constructs becomes unnecessary. This is the approach used in most **competency-based qualifications systems**. While it is very useful for defining skill-based competencies, many of the definitions focus entirely on competence in the job context, often ignoring important components of performance such as cognitive process skills and value orientation. This approach has no value in identifying potential and difficulties are experienced in effectively defining higher order complex performance. Some definitions using a performance-based approach include:

- The ability to perform the activities within an occupation or function to the standard expected in employment (Pickett, 1995).
- Job competence is the employee's capacity to meet or exceed a job's requirements by producing the job outputs at an expected level of quality within the constraints of the organisation's internal and external environment (Dubois, 1993).

In summary, Meyer (1996) points out that the attribute approach to competencies focuses largely on the individual as a person with all the difficulties associated with that; the performance-based approach focuses on the demonstration of required behaviour, largely in the work context, which in turn imposes certain limitations on its usefulness. Both have an important place in learning and human resource management when used appropriately.

The challenge is obviously to find a working definition of competency which can be used in a variety of contexts and situations. Meyer (1996, p. 34) provides the following definition:

“Competency is the integration of knowledge, skill and value orientation, demonstrated to a defined standard in a specific context”

In SAQA terms (see glossary of concepts and terminology), the competence to perform a particular ETD role is sometimes referred to as a “competency”. Thus needs analysis,

facilitation, assessment, coaching and evaluation, are often referred to as “competencies”.

In addition, McLagen (1989, p. 77) defines a competency as an area of knowledge or skill that is critical for producing key outputs. Competencies answer the question “what knowledge and skills will enable people to perform ETD work?”

Based on the above definitions, the conceptual framework based on Bloom (1956) can be used to assist in understanding the concept of competency from different perspectives. Three domains of competency are identified:

- Psychomotor, i.e. the action component of a performance
- Cognitive, i.e. the mental processes underpinning performance
- Affective, i.e. the emotional component of performance

From the above classification, a number of important issues can be highlighted as regards the definitions:

- It is **integrative** and consequently views human behaviour as holistic. It integrates components of a particular competency. There also appears to be a linkage between this understanding of integration and levels of complexity as well as systemic thinking (Jaques, 1995). The higher the level of complexity, the less possible it becomes to isolate variables. It could, of course, be argued that other components of competence of a more unconscious nature are also integrated in a competency and of course this is correct. However, for practical purposes, it is the three elements of knowledge, skill and value orientation which are measurable and can be influenced by those not trained as psychologists.
- **Knowledge** can be defined as “what we know (i.e. information) which has been internalised, and also comprises how we think and understand ... it is information, theory, arguments, or concepts that have been conceptualised within our own particular mental and affective or emotion structures” (HSRC, 1995). Given the

importance of intellectual capital in an organisational context and systemic understanding by individuals, the ability to use information by converting data to knowledge is essential to any level or content area of competency

- **Skills** infer “doing” or “the ability to do”. This may be abstract at a cognitive level, but the connotation around skills has been largely concerned with psychomotor activity. No one will argue that predominantly psychomotor skills include a cognitive element; but the physical expression of skills such as music, art, cabinet-making, driving a car or operating equipment has dominated the concept of skill (HSRC, 1995).
- **Value orientation** has received very little emphasis in the literature and debate on competencies; yet no activity or performance is value free. In Meyer (1996), the view is expressed that value orientation is an essential component of competency and performance. To illustrate this he gives the following examples:
 - It is not only skill development which has given South East Asian countries their remarkable levels of competitiveness; it is largely their work ethic.
 - It is not possible to be consistently “competent” in any field of endeavour in South Africa without a value orientation which supports diversity.
 - International and organisational competitiveness is in part a function of a quality and customer service ethic or value system which extends beyond simply skills. A value orientation essential to competency in the mining industry, for example must be safety. To attempt to define competencies without considering the underpinning value orientation is to ignore an important component of competency.

In summary a competency is only useful if it can be demonstrated or measured and this by definition requires standards of performance and statements of the parameters or context in which performance is required.

This is by no means a complete definition of competence as each context will require its own working definition. It does, however, incorporate key concepts and can be applied in respect of the collective competence of organisations or teams, the individual competencies required by professions or specific jobs and those generic self-management competencies essential to individual functioning in a modern economy (Meyer, 1996).

Finally, in defining competencies it is necessary to understand how the concept of performance is used in conjunction with that of competency. Performance, particularly in the context of performance management, is frequently associated with and often confused with competence. While competence is generally demonstrated by performance, performance is a broader concept and competence does not necessarily result in satisfactory performances. The following model of performance illustrates this (Meyer, 1996).

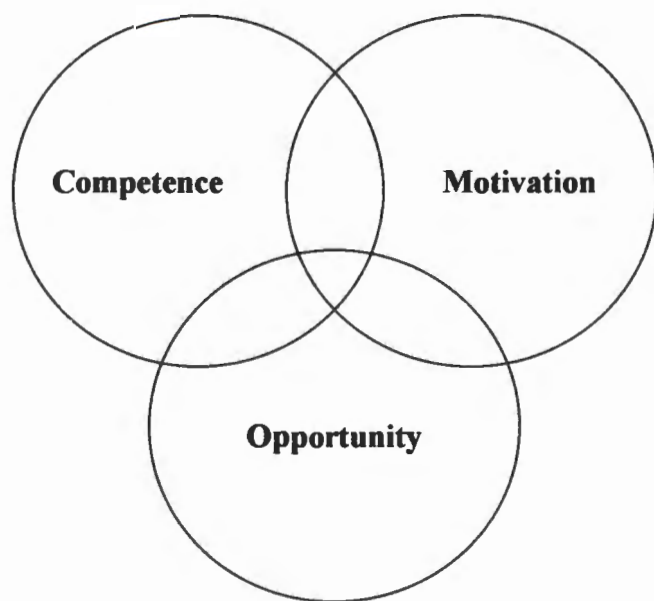


Figure 6: Relationship between competence and performance

It can be said that competence is a necessary but not a sufficient condition of performance. A competent individual will not perform to standard if he or she is not

motivated and will be unable to perform if the opportunity to perform is frustrated. This model provides the basis for a useful performance analysis process (Meyer, 1996).

While performance, and by definition competence, is concerned with the present, potential has to do with the **future**. Identification of potential has to do with identifying now the capability of a person to achieve a certain level of competence in the future. As a concept it is concerned with measuring attributes that can predict future performance and the considerable difficulties concerned with validity and measurement apply (Meyer, 1996).

With the above information as background to explain the concept of competencies from various angles, contexts and perspectives, the focus will now be on what specific knowledge and skills will enable people to perform ETD work. Many research studies have attempted to describe what ETD facilitators do (for example, Competency Analysis, 1979; Pinto & Walker, 1978; Varney, 1980 cited in Rothwell & Kazanas, 1994). These efforts have been confounded, at least in part, by unclear definitions of ETD and by sheer variety of philosophies and approaches to the ETD field. However, Models for Excellence (1983) began with an extensive review of prior research about the ETD facilitator's job. It culminated in an impressive description of ETD "roles", "competencies" and "work outputs". In this context, a "role" means of cluster of behaviours and activity areas; a "competency" means an underlying skill to enact the role; and a "work output" means a tangible result of role behaviour or application of a competency. The ETD roles have been listed in Table 3, and correspond with the roles identified by the National Training Board (1994). As regards ETD competencies, the American Society for Training and Development: ASTD Models for Learning Technologies – Roles, Competencies and Outputs (1998) grouped the ETD competencies into generic competencies reflecting general competencies, training and development competencies, distribution method competencies and presentation method competencies.

In general, competencies are likely to apply to numerous roles. Similarly, it is likely that many people within an ETD department will possess certain basic competencies,

although their level of mastery will vary. For the purpose of the research, all the competencies identified by Models of Excellence (1983) and the ASTD Models for Learning Technologies have been integrated into a table reflecting four categories – General Competencies (16); training and development competencies (27); distribution method competencies (6) and presentation method competencies (4). Each competency also reflects a description for clarity and understanding (see Table 5).

Table 5
ETD Competencies

General Competencies	Description
1. Adult Learning:	Understanding how adults learn and how they use knowledge, skills, and attitudes.
2. Instructional Design:	Using the training cycle (analysis, design, development, delivery, evaluation) for creating adult learning interventions that fulfil organisational goals.
3. Performance Gap Analysis:	Performing “front-end analysis” by comparing actual and ideal performance levels in the workplace. Identifying opportunities and strategies for improving performance
4. Change Management:	Helping people adapt to the changes brought on by new technologies and helping them to see the value and benefits of new technologies.
5. Leadership:	Leading, influencing, and coaching others to help them achieve desired results.
6. Industry Awareness:	Understanding the current and future climate of one’s company’s industry and formulating strategies that respond to that climate.
7. Buy-in / Advocacy:	Building ownership and support for workplace initiatives.
8. Interpersonal Relationship Building / Collaboration:	Effectively interacting with others in order to produce meaningful outcomes.
9. Consulting:	Helping clients and stakeholders to question their assumptions, determine their needs, and plan implementation strategies for achieving their goals.
10. Business Knowledge:	Demonstrating awareness of business functions and how business decisions affect financial and non-financial work results.
11. Systems Thinking:	Recognising the interrelationship among the driving forces that connect seemingly isolated incidents within the organisation. Also taking a holistic view of performance problems in order to find the root causes.
12. Contracting	Negotiating, organising, preparing, monitoring, and evaluating work performed by vendors and consultants.
13. Project Management:	Assessing, planning, negotiating, organising, monitoring, and evaluating the delivery process. Effectively managing human, capital, and financial resources.

General Competencies	Description
14. Communication	Applying effective verbal, non verbal, and written communication methods to achieve desired results.
15. Program Evaluation:	Measuring the success of learning interventions.
16. Learning Technology Methods:	Deciding which combination of instructional methods, presentation methods, and distribution methods will best deliver the final program to the learner.
Training and Development Competencies	
17. Audio / Visual Skill:	Selecting and using audio / visual hardware and software
18. Career Development Knowledge:	Understanding the personal and organisational issues and practices relevant to individual careers.
19. Competency Identification Skill:	Identifying the knowledge, skill, behaviour requirements of jobs, tasks, roles.
20. Computer Competence:	Understanding and being able to use computers.
21. Cost-Benefit Analysis Skill:	Assessing alternatives in terms of their financial, psychological, and strategic advantages and disadvantages.
22. Counselling Skill:	Helping individuals recognise and understand personal needs, values, problems, alternatives, and goals.
23. Data Reduction Skill:	Scanning, synthesising, and drawing conclusions from data.
24. Delegation Skill:	Assigning task responsibility and authority to others.
25. Facilities Skill:	Planning and co-ordinating logistics in an efficient and cost-effective manner.
26. Feedback Skill:	Communicating opinions, observations, and conclusions such that they are understood.
27. Futuring Skill:	Projecting trends and visualising possible and probable futures and their implications.
28. Group Process Skill:	Influencing groups to both accomplish tasks and fulfil the needs of their members.
29. Intellectual Versatility:	Recognising, exploring, and using a broad range of ideas and practices. Thinking logically and creatively without undue influence from personal biases.
30. Library Skill:	Gathering information from printed and other recorded sources. Identifying and using information specialists and reference services and aids.

Training and Development Competencies	Description
31. Model Building Skill:	Developing theoretical and practical frameworks which describe complex ideas in understandable, usable ways.
32. Objectives Preparation Skill:	Preparing clear statements which describe desired outputs.
33. Organisation Behaviour Understanding:	Seeing organisations as dynamic, political, economic, and social systems which have multiple goals; using this larger perspective as a framework for understanding and influencing events and change.
34. Organisation Understanding:	Knowing the strategy, structure, power networks, financial position, systems of a SPECIFIC organisation.
35. Performance Observation Skills:	Tracking and describing behaviours and their effects.
36. Personnel / HR Field Understanding:	Understanding issues and practices in other HR areas (Organisation Development, Organisation Job Design, Human Resource Planning, Selection and Staffing, Personnel Research and Information Systems, Compensation and Benefits, Employee Assistance, Union / Labour Relations).
37. Presentation Skills:	Verbally presenting information such that the intended purpose is achieved.
38. Questioning Skills:	Gathering information from and stimulating insight in individuals and groups through the use of interviews, questionnaires, and other probing methods.
39. Records Management Skill:	Storing data in easily retrievable form.
40. Research Skills:	Selecting, developing, and using methodologies, statistical, and data collection techniques for a formal inquiry.
41. Training and Development Field Understanding:	Knowing the technological, social, economic, professional, and regulatory issues in the field; understanding the role T&D plays in helping individuals learn for current and future jobs.
42. Training and Development Techniques Understanding:	Knowing the techniques and methods used in training: understanding their appropriate uses.
43. Writing Skills:	Preparing written material which follows generally accepted rules of style and form, is appropriate for the audience, creative, and accomplishes its intended purposes.

Distribution Method Competencies	
44. Cost Analysis / ROI of the Distribution Methods:	Understanding the relative costs of each distribution method, or combination of methods, and assuring that the organisation is receiving a good value for the money spent on learning technologies.
45. Limitations and Benefits of the Distribution Methods:	Knowing the true capabilities of each distribution method, or combination of methods, and tying these capabilities in with the needs of the organisation.
46. Effect of Distribution Method on Learners:	Assessing how various distribution methods, or combination of methods, will cater to individual learning styles. Balancing learner needs against organisational needs.
47. Integration of Distribution Methods:	Mixing distribution methods in an effective and efficient manner to facilitate learning.
48. Remote Site Co-ordination:	Co-ordinating the installation and maintenance of distribution technology at a remote site and assuring that all systems continuously meet design specifications.
49. Technology Evaluation:	Assuring that all component technologies continuously meet technical design and performance specifications.
Presentation Method Competencies	
50. Cost Analysis / ROI of the Presentation Methods:	Understanding the relative costs of each presentation method, or combination of methods, and assuring that the organisation is receiving a good value for the money spent on learning technologies.
51. Limitations and Benefits of the Presentation Methods:	Knowing the true capabilities of each presentation method, or combination of methods, and tying these capabilities in with the needs of the organisation.
52. Effect of Presentation Method on Learners:	Assessing how various presentation methods, or combination of methods, will cater to individual learning styles. Balancing learner needs against organisational needs.
53. Integration of Presentation Methods:	Mixing presentation methods in an effective and efficient manner to facilitate learning.

3.5 ETD OUTPUTS

In the context of an ETD facilitator's job, "work outputs" means a tangible result of role behaviour or application of a competency (Model for Excellence, 1983). Robinson and Robinson (1998), describe "output" as a tangible result or accomplishment that is produced from human performance. Models of Excellence, (1983, p. 31-33) list the critical outputs (102) for the ETD field under several ETD roles.

Table 6:

ETD outputs for the ETD field

Evaluator:

1. Instruments to assess individual change in knowledge, skill, attitude, behaviour, and results
2. Instruments to assess a programme and instructional quality
3. Reports (written and oral) of programme impact on individuals
4. Reports (written and oral) of programme impact on an organisation
5. Evaluation and validation of designs and plans (written and oral)
6. Written instruments to collect and interpret data

Group facilitator:

7. Group discussions on several issues and needs are constructively assessed
8. Group decisions where individuals all feel committed to action
9. Cohesive teams
10. Enhanced awareness of group process, self, and others

Individual Development Counsellor:

11. Individual career development plans
12. Enhanced skills on the part of an individual to identify and carry out his / her own department needs / goals
13. Referrals to professional counselling
14. Increased knowledge by the individual about where to get development support
15. Tools, resources needed in career development
16. Tools for managers to facilitate employees' career development
17. An individual who initiates feedback, monitors and manages career plans

Instructional Writer:

18. Exercises, workbooks, worksheets
19. Teaching guides
20. Scripts (for video, film, audio)
21. Manuals and job aids
22. Computer software
23. Tests and evaluation forms
24. Written role plays, simulations, games
25. Written case studies

Instructor:

26. Videotapes, films, audiotapes, computer-aided instruction, and other audio-visual materials facilitated
27. Case studies, role plays, games, tests, and other structured learning events directed
28. Lectures, presentations, stories delivered
29. Examinations administered and feedback given

- 30. Students' needs addressed
- 31. An individual with new knowledge, skills, attitudes, or behaviour in his / her repertoire

Manager of Training and Development

- 32. Training and development department or project operating objectives
- 33. Training and development budgets developed and monitored
- 34. Positive work climate in the training and development function or project group
- 35. Department / project staffed
- 36. Training and development standards, policies, and procedures
- 37. Outside suppliers / consultants selected
- 38. Solutions to department / project problems
- 39. Training and development actions congruent with other HR and organisation actions
- 40. Relevant information exchanged with clients / departments (internal and external)
- 41. Staff evaluated
- 42. Staff developed

Marketer:

- 43. Promotional materials for training and development programmes and curricula
- 44. Sales presentations
- 45. Programme overviews
- 46. Leads
- 47. Contracts with training and development clients (internal and external) negotiated
- 48. Marketing plan (developed and implemented)
- 49. Training and development programme / services visible to target markets

Media Specialist

- 50. Training and development computer software
- 51. Lists (written and oral) of recommended instructional hardware
- 52. Graphics
- 53. Video-based material
- 54. Audiotapes
- 55. Computer hardware in working order
- 56. Audio-visual equipment in working order
- 57. Media users advised / counselled
- 58. Productions plans
- 59. Purchasing specifications / recommendations for instructional / training software
- 60. Purchasing specifications / recommendations for instructional / training hardware

Needs Analyst:

- 61. Performance problems and discrepancies identified and reported (written / oral)
- 62. Knowledge, skill, attitude problems and discrepancies identified and reported (written / oral)
- 63. Tools to assess the knowledge, skills, attitude, and performance level of individuals and organisations
- 64. Needs analysis strategies
- 65. Causes of discrepancies inferred

Programme Administrator:

- 66. Facilities and equipment selected and scheduled
- 67. Participant attendance secured, recorded
- 68. Hotel / conference centre staff managed
- 69. Faculty scheduled

- 70. Course material distributed (on-site, pre-course, post-course)
- 71. Contingency plans for back-ups, emergencies
- 72. Physical environment maintained
- 73. Program follow-up accomplished

Programme Designer:

- 74. Lists of learning objectives
- 75. Written programme plans / designs
- 76. Specifications and priorities of training content, activities, materials, and methods
- 77. Sequencing plans for training content, activities, materials, and methods
- 78. Instructional contingency plans and implementation of strategies

Strategist:

- 79. Training and development long-range plans included in the broad human resource strategy of the client organisation
- 80. Identification (written / oral) of long-range training and development strengths, weaknesses, opportunities, threats
- 81. Descriptions of the training and development function and its outputs in the future
- 82. Identification of forces / trends (technical, social, economic, etc) impacting training and development
- 83. Guidelines / plans for implementing long-range goals
- 84. Alternative directions for training and development
- 85. Cost / benefit analysis of the impact of training and development on the organisation

Task Analyst:

- 86. Lists of key job / unit outputs
- 87. Lists of key job / unit tasks
- 88. Lists of knowledge / skill / attitude requirements of a job / unit

- 89. Descriptions of the performance levels required in a job / unit
- 90. Job design, enlargement, enrichment implications / alternatives identified
- 91. Subtasks, tasks, and job clustered
- 92. Conditions described under which jobs / tasks are performed

Theoretician:

- 93. New concepts and theories of learning and behaviour change
- 94. Articles on training and development issues / theories for scientific journals and trade publications
- 95. Research designs
- 96. Research reports
- 97. Training models and applications of theory
- 98. Existing learning / training theories and concepts evaluated

Transfer Agent:

- 99. Individual action plans for on-the-job / real world application
- 100. Plans (written / oral) for the support of transfer of learning in and around the application environment
- 101. Job aids to support performance and learning
- 102. On-the-job environment modified to support learning

3.6 ETD OUTCOMES

An outcome is a detailed statement of what a person has to be able to do when they have learned what is intended in a standard or qualification (see glossary of concepts and terminology). A standard is a detailed description of a component of applied competence and serves as a criterion against which somebody may be assessed for entering or exiting a learning programme, occupational level or profession. In practical terms, if an ETD facilitator has to demonstrate the ability to perform **learning facilitation tasks** with understanding and reflexivity, the following applied competence standards will form the basis against which the facilitator's level of competence will be assessed (SAQA Bulletin, Volume Two – Number Two, Part 1, 2000).

Practical competence. The demonstrated ability to consider a range of options and make decisions about:

1. Learning styles and preferences and ways of accommodating diversity in learners or group of learners.
2. How to approach learners as able and creative individuals.
3. Learners' frame of reference and entry-level assumptions.
4. Ways of handling conflict, disagreement and diverse needs and interests in learning groups.
5. A range of appropriate ways of giving feedback to learners.
6. Use questioning for different learning purposes.
7. Providing opportunities for learners to experiment, apply their learning and receive feedback in a supportive environment while on the job and in simulated conditions.

Foundational competence. The demonstrated understanding of:

8. A range of learning styles, preferences and motivations and their relationship to learning.

9. Group dynamics and how they are managed to enhance learning.
10. Strategies for facilitation of groups and individual learning.

Reflexive competence. The demonstrated ability to:

11. Reflect on the learning process and the extent to which it has achieved the stated learning objectives in ways that are time and cost-effective.
12. Reflect on the applicability and value of the learning experience.
13. Analyse the learning situation and decide on adaptations where requested.
14. Reflect with learners on the success of teaching / learning strategies.

Assessment criteria (for integrated competence). The learner must:

- Generate, explore and consider options for appropriate action
- Identify the most appropriate course of action in relation to the particular context, topic, learner group, level of learning, and resources available.
- Explain reasons for that particular selection as well as what was taken into account in making the selection.
- Perform the identified action, while continuously monitoring and adapting performance as required.
- Explain what has been done and why.
- Evaluate own performance and identify areas for improvement.
- Reflect on the learning and performance; and
- Develop a plan or strategy for future action.

Range Statement. Performance, explanation and evaluation must be undertaken in terms of the relationship between:

- **ETD and pedagogic** concepts, principles and procedures.
- Concepts, principles, rules and procedures relevant to the **area of learning (topic);** and

- **Contextual factors** which impact on performance (including social, environmental, learner, institutional and economic factors).

Using the working definition of competency of Meyer (1996) which can be used in a variety of contexts and situations – “The integration of knowledge, skills and value orientation, demonstrated to a defined standard in a specific context”. - There appear to be terms used which relate to each other, such as “competence”, “outcome”, and “ability”, and when used in an operational environment, sometimes confuses the users of it. For the purpose of this research, the relationship between roles, competencies and outcome can be unpacked and distinguished as follows:

Roles: It means a cluster of behaviours or activity areas and practised by facilitators across the entire ETD spectrum, but mainly associated with activities linked to the training and development cycle (needs analysis, design specifications, development of learning material, facilitation of learning, assessment of competencies, learners support, and gathering of data for evaluation purposes), and the management of ETD practices.

Competencies: It means underlying skills, knowledge and understanding required to enact the different roles, and when-

- Ability is given expression in performance in the cognitive, psychomotor and affective domains and at various levels within each domain and across the domains.
- Components of a competency have similar meaning with reference to applied competence:
 - Practical competence / skills / psychomotor domain.
 - Foundational competence / knowledge / cognitive domain / understanding.
 - Reflexive competence / value orientation / affective domain.
- The three inter-connected kinds of competence (practical, foundational and reflexive) are demonstrated in a specific context.

Outcomes: It means when applied competence (skills) are performed in a context, to defined standards and integrating knowledge and its application. Embedded in the standards are also those critical outcomes which include identifying and solving problems; working as a team; organising and managing oneself; collecting, analysing, organising and evaluating information; communicating effectively; using science and technology; and recognising problem-solving contexts.

However, in achieving the end result, the **capacity** of the individual (personal commitment using personal attributes) and **competence** must result in successful performance in a managed work environment (Bellis, 1999).

Although the unpacking of the relationship between ETD roles, competencies and outcomes, as cited above is helpful, it is not detailed enough to illustrate the overall purpose and outcomes of ETD work of facilitators. With reference to the draft Unit Standards for Occupationally-directed ETD practices, the following overall outcomes at basic, intermediate and advanced occupational levels are summarised in Table 7, where each overall outcome is compared across NQF levels 4, 5 and 6. These overall outcomes to form part of the project research. The full overall purpose and specific outcomes are listed in tabular format in Appendix A.

Table 7

Overall ETD Outcomes at NQF Levels 4, 5 and 6

ETD ROLE	NQF LEVEL 4 OUTCOMES	NQF LEVEL 5 OUTCOMES	NQF LEVEL 6 OUTCOMES
Plan learning	Plan learning events	Plan a learning programme	Plan a curriculum
Develop materials	Prepare learning aids	Develop training materials	Co-ordinate the design of a variety of training materials
Facilitate learning	Facilitate targeted skills development	Facilitate learning using a variety of methodologies	Facilitate learning through selecting and integrating methodologies
Assess learning	Conduct an Assessment	Design integrated assessment for a learning programme	Manage a quality assurance system
Guide and counsel	Advise and refer learner	Guide and support learning	Guide and counsel learners
Manage learning	Manage a skills development course	Manage a learnership / learning programme	Manage a learning system
Evaluate learning	Evaluate a course	Evaluate a learning programme	Evaluate learning systems
Conduct research	Conduct elementary field research in ETD or occupation	Design and conduct research	Design, conduct and co-ordinate research
Occupational development	Engage in occupational developments	Engage in occupational development	Engage in occupational development

3.7 CONTEXT OF ETD ROLES PERFORMED WITHIN THE TEXTILE INDUSTRY

The need to upgrade training competence in the textile industry was identified by the then Textile Industry Training Board, and now incorporated as a chamber of the newly established Clothing, Textiles, Footwear and Leather SETA (CTFL SETA). Appendix B provides evidence of the request.

As the general aim of this research deals with the development of roles, competencies and outcomes of existing ETD facilitators in the textile industry, it is necessary to examine the context in which the ETD roles are being practised within individual companies, the various roles themselves, the role level and role focus. The purpose was to gather sufficient background information on the above-mentioned issues in order to structure a survey questionnaire which will provide information on where the ETD profession is today as well as the level of mastery at which these various roles are practised at supportive, operational, co-ordinating, implementation and strategic levels within companies.

Background information was obtained from several intensive and highly productive conversations from the industry's senior ETD facilitators and the Director of the CTFL SETA, as well as information obtained from the skills audit conducted in the industry during 1997. Appendix C incorporates the skills audit.

The **findings of the front-end analysis** are grouped and summarised in the following categories for reporting purposes:

- **ETD roles:** Based on the ETD roles identified in the ETD Practice Project (1998, p. 23), the industry confirmed that all eleven generic roles are performed within individual companies. Facilitators fulfil a combination of these roles, depending on the level of responsibility and size of the company. The roles are interrelated and depend on one another in order to perform effective ETD practices. It also appears

evident from the discussions that basic ETD roles focus mainly on the planning and facilitating of **operator** learning in the workplace where learners work with a range of machinery, equipment and textile processes. At **mechanician** learning level, the ETD roles focus on both trade theory and practice, while at **managerial level**, the ETD roles focus on behavioural skills learning in simulated conditions and classroom environments. The roles that are being performed can be referenced to Table 3 of this mini-dissertation.

- **Role level:** Depending on the size of the organisation, the typical positions are that of instructor / coach, training officer, senior training officer, training manager, HRD manager and personnel manager. Using the Paterson-grading system, the positions fall into three distinct decision-making levels:

- Grade B: instructor / coach.

- Grade C: training officer / senior training officer.

- Grade D: training manager, human resource development manager, personnel manager.

The skills audit (1997, p. 29), indicates that the industry has 172 ETD facilitators which represents 1 facilitator for every 229 employees (98 instructors, 52 training officers and 22 training managers). The ratio of employees per ETD job level is an area of concern.

- Training Manager : 1786

- Training Officer : 755

- Instructor : 400

- **Role focus:** The data in the skills audit do not reflect the percentage training conducted on technical, behavioural, administrative or ABET activities. However, the senior ETD facilitators indicated that 80 % of training is conducted by technical

trainers / instructors on textile processes and maintenance of machinery and equipment. These facilitators have a technical background and learning is mainly task orientated at operator level with a competency-based orientation towards the various textile trades occupations in the industry. As regards ABET, relatively few companies (21) out of 111 companies provide ABET.

- **Company size:** The skills audit (1997) confirms that the average size company in the survey is 354, compared to 1030 in the 1991 skills audit report. 38,8 % of the sample employed less than 100 employees, while 23,4 % below 300 and 25,2 % above 300. In small companies with no HRD department, outside consultants are being used to facilitate technical training at mechanician job level.
- **Training activities:** Training activities take place in 34 operational areas incorporating all textile processes within the industry. In the skills audit (1997), training needs were identified, in order of priority: operator skills, productivity, quality systems, process knowledge and inter-personal skills. Areas of concern identified where low percentage training activity occurred were: decision-making, machine and equipment knowledge and fault identification and correction.

With the above background information and findings of ETD practices in the textile industry, the empirical study can now be addressed.

3.8 CHAPTER SUMMARY

In this chapter, the relationship between roles, competencies and outcomes in the ETD field was researched from literature. Both external and local trends having an impact on workplace learning were identified. The various ETD practices, roles, competencies, outputs (quality indicators), and outcomes which are necessary to support learning were identified and discussed. It is clear that if ETD facilitators wish to add value, a host of new skills, knowledge and values need to be acquired for them to become more professional in their chosen careers.

With this the second specific objective of the research has been achieved, namely to reflect on the relationship between roles, competencies and outcomes in the ETD field.

Chapter 4 addresses the methods used to conduct the empirical study.

CHAPTER 4

EMPIRICAL STUDY

This chapter focuses on the methods used to conduct the empirical study. The choice and composition of the study population, measuring instruments and procedures used for the analysis and interpretation of the survey questionnaire are discussed.

4.1 STUDY POPULATION

In this section the study population is addressed. Attention is given to the population, sample and company size.

4.1.1 Population

The population comprises ETD facilitators employed by 34 textile companies on a full-time basis as well as consultants appointed to oversee skills development in small size companies where no HRD departments exist. All the companies, except for three, are situated in the coastal areas of Kwazulu-Natal, the Western Cape and Eastern Cape (Table 8).

Table 8
Provincial Distribution of Companies

Region	Number	%
Gauteng	3	8,8
Kwa-Zulu Natal	15	44,1
Western Cape	12	35,3
Eastern Cape	4	11,8
TOTAL	34	100

The size of company is also important and the table below reflects the size identified:

Table 9
Company Size Statistics

Company	Size	Frequency	Percent
1. Small	1 – 49	3	4,3
2. Medium	50 – 199	1	1,4
3. Large	200 +	66	94,3
		70	100

The above statistics reflect that the average company employs more than 200 employees, and confirms the average size company identified in the skills audit (1997).

4.1.2 Sample

As the need for the research was identified by the Textile Industry Training Board (TITB) on behalf of the industry, a representative sample of 70 ETD facilitators were identified to take part in the survey. Based on the skills audit conducted in the industry in 1997, this sample represents 40,7 percent of all ETD facilitators employed. Furthermore, the average length of service of the sample ETD facilitators in ETD practice is 14,5 years which is indicative of vast experience in ETD practices. The selection of companies ensured that the sample of ETD facilitators represented various decision-making levels within ETD practice and incorporated instructors (first-line supervision level), training officers (technical level), training managers (managerial level) and external consultants focussing on skills development at various occupational categories and levels. Appendix D reflects the list of company and ETD participants.

4.2 MEASURING BATTERY

In this section the selection, design and development of the data collection method, the description of the type of collection method, the process to collect data and analysis of data are discussed, as well as the reliability and validity of the measuring battery.

4.2.1 The data-collection method

A structured survey questionnaire was selected as the data-collection method as it can reach a large number of people spread geographically; the data are easy to collate and interpret; the method is inexpensive; confidentiality can be maintained; the method provides objective results; one can gather a large amount of data; and it needs little administration. The disadvantages however, are that survey questions can be misinterpreted; it allows no personal interaction; communication is one way; questions can be difficult to design, and it may have a low return rate (Franklin, 1995).

The survey questionnaire was tailored to determine the ETD roles; the extent of mastery of ETD competencies; the future importance of ETD competencies for facilitators; and the extent of mastery in ETD outcomes at different levels of applied competence. The use of language was carefully tailored to focus on education, training and development practices within the ETD field and where information can be prepared easily across companies and ETD job categories. The efficiency of this data gathering method is further enhanced as the data can be easily captured and reported through computer scoring technology.

4.2.2 Description of the data-collection method

The survey questionnaire document contains concise, pre-planned questions and descriptions, designed to gather specific information about a group of ETD facilitators in a textile manufacturing context (adapted from ASTD Models for Learning Technologies – Roles, Competencies and Outputs, 1998).

The questionnaire is divided into three sections. **Section A** deals with ETD roles. In this section information about the position of the person completing the questionnaire, the company's name and size of the organisation is asked as general and background information. ETD roles are listed with a concise description of each role. Each role is further divided into five role levels reflecting various occupational levels, and four role areas to indicate a specific training specialisation field.

Section B deals with 53 generic ETD competencies, each with a concise description. Each competency contains a six-point scale where a proficiency choice as to the level of mastery is recorded. A further four-point scale for each competency is reflected where a choice is recorded as to the future importance of the particular competency.

The competencies are divided into four categories, namely:

- General competencies (16 items), which describe those competencies that are essential to any person involved in the ETD or HRD field (McLagen, 1989, p. 77).
- Training and development competencies (27 items), which describe those competencies that are associated with the training and development cycle: needs analysis, design and development, facilitation, assessment, learner support and evaluation (Models for Excellence, 1983, p. 36).
- Distribution method competencies (6 items), which describe those competencies associated with the selection, management and use of electronic technologies to deliver training via methods of transmitting the message (ASTD Models for Learning Technologies, 1998, p. 7).
- Presentation method competencies (4 items), which describe those competencies associated with the selection, management and use of electronic technologies to deliver training via methods of presenting training (ASTD Models for Learning Technologies, 1998, p. 7).

Section C deals with 30 learning / competence outcomes grouped in a range of nine ETD roles. Each ETD role reflects outcomes organised from a basic competence to an advanced and specialised competence. Each outcome contains a six-point scale where a proficiency choice as to the level of expertise is recorded.

The outcomes are derived from the draft Unit Standards published in the Government Gazette, No 21142, dated 3 May 2000. Appendix E contains the survey questionnaire.

4.2.3 Data-gathering process

The completed survey questionnaire was discussed at a meeting of an appointed task team comprising all stakeholders in the industry to ratify the face validity of the questionnaire. The meeting took place on 7 August 2000 in Durban at the CTFL SETA offices. A presentation was made by myself to explain the purpose of the research project, the design and outlay of the questionnaire with emphasis on the theoretical underpinnings of roles, competencies and outcomes and the literature review covered to come up with the final survey document. The meeting endorsed the face validity of the questionnaire barring minor changes to the instructions for each section of the questionnaire. Appendix F reflects an extract of the minutes and the stakeholders involved.

Logistical and administrative arrangements for the dissemination and retrieval of responses were agreed at the meeting. The textile chamber of the SETA accepted responsibility for the dissemination and co-ordination of the investigation.

4.2.4 Survey questionnaire completion procedures

The respondents read the cover page of the research project individually as orientation to the need and purpose of the research project, the three divisions of the questionnaire and terms of reference. The envisaged benefits flowing from the findings of the research are also made known to the respondent and the fact that the respondent's name

will remain anonymous. The respondent is also made aware of the due date of the questionnaire. Each section of the questionnaire included an instruction sheet with an example which the respondent must read before completing the questionnaire.

Seventy (70) respondents from thirty-four (34) companies completed the questionnaire. The gathered data were organised in a format which facilitated the capturing of the data on a spreadsheet using Microsoft Excel 97. The statistical analysis was performed with the assistance of the SAS programme for Windows 6.12 (SAS Institute, 1996).

4.3 STATISTICAL ANALYSIS

In this research use was made of descriptive statistics to summarise or describe the data in terms of their important features.

The description and comparison of the results were performed using means (averages) and standard deviations. The means is the sum of all responses of a particular question, which are then divided by the number of responses given. The standard deviation indicates how spread out the data are from the mean. It is only used in association with means (Steyn, 1995, p. 101).

Alpha-coefficients were calculated to determine the internal consistency of the various questionnaires. This index shows the extent to which all the items in the test are measuring the same characteristics (Huysamen, 1993, p. 105).

4.4 CHAPTER SUMMARY

In this chapter, the research method used was discussed. This included the study population, measuring battery and statistical analysis.

Chapter 5 discusses the results of the empirical study.

CHAPTER 5

RESULTS AND DISCUSSION

The results of the empirical study are reported and discussed in this chapter. The mean (M), standard deviations (SD) as well as the alpha coefficient (α) of each measuring instrument are reported.

5.1 DESCRIPTIVE STATISTICS WITH REGARD TO ROLE LEVEL AND ROLE FOCUS

The role level percentages in the five occupational levels were calculated, as well as the role focus percentages in the four training specialisation fields. A rank order of the ETD roles were determined. Table 10 reflects the descriptive statistics according to role level and focus.

Table 10

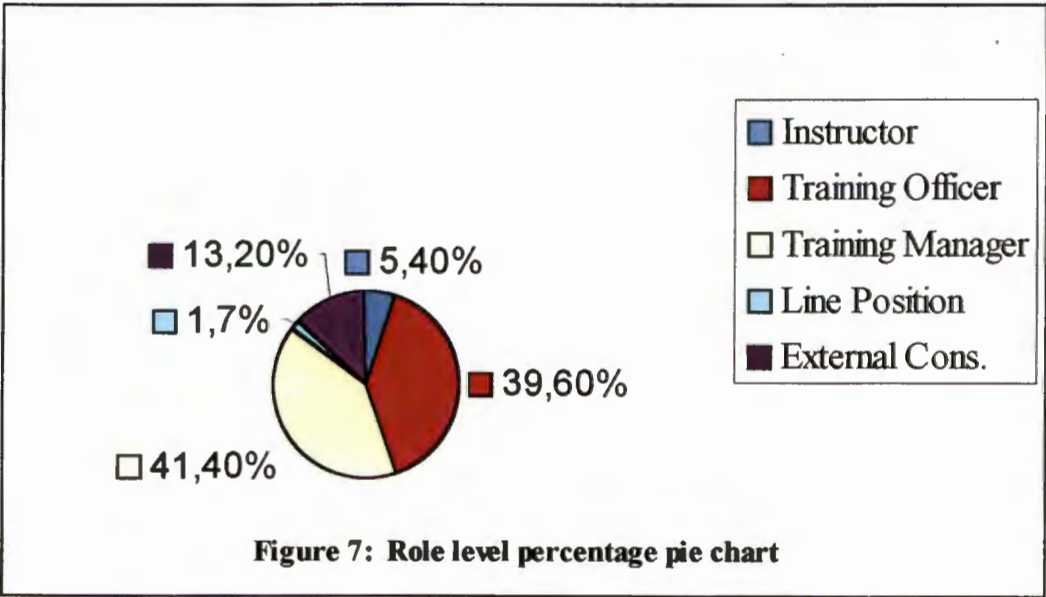
Descriptive Statistics per Role Level and Focus

Roles	Role Level Percentage					Role Focus Percentage				Frequency N = 69	%	Role Importance
	Instructor	Training Officer	Training Manager	Line Posi- tion	External Consul- tant	Technical	Behavioural	Admin	ABET			
HRD manager	3,9	33,3	49,0	-	13,7	84,3	78,4	39,2	33,3	51	73,9	8
Needs analyst	4,7	40,6	42,2	-	12,5	88,9	77,8	87,5	62,5	64	92,8	1
Learning materials developer	3,8	44,2	34,6	1,9	15,4	90,2	70,5	23,5	13,7	53	76,8	7
Learning experience designer	-	42,9	40,8	-	16,3	87,5	62,5	35,4	20,8	49	71,0	10
Individual learning facilitator	6,7	41,7	38,3	-	11,7	86,4	64,4	32,2	32,2	60	87,0	4
Group learning facilitator	8,1	40,3	37,1	1,6	12,9	80,6	67,7	32,3	33,9	62	89,9	2
Assessor	6,9	41,4	36,2	1,7	13,8	94,8	60,3	36,2	29,3	58	84,1	5
Evaluator	4,0	44,0	38,0	-	12,0	85,7	69,4	42,9	42,9	50	72,5	9
Administrator	6,6	41,0	41,0	1,6	9,8	85,0	66,7	65,0	45,0	61	88,4	3
Strategist	2,2	23,9	56,5	-	17,4	85,1	74,5	46,8	42,6	47	68,1	11
Development counsellor	7,3	41,8	41,8	-	9,1	81,5	55,6	46,3	37,0	56	81,4	6
Average	5,4	39,6	41,4	1,7	13,2	86,4	68,0	44,3	35,7			

The results obtained from the descriptive statistics with regard to **SECTION A** of the questionnaire indicate the following:

5.1.1 Role level discussion

Figure 7 reflects the average role level percentage in five different occupational levels.



With reference to Figure 7 and Table 10 the following results are discussed:

- Some 81,0% of all ETD activities in the textile industry are performed at training officer and training manager occupational levels.
- Within the instructor occupational category, the facilitation of group learning role received the most responses (81,0%), followed by learner support (7,3%) and assessing whether learners have mastered learning outcomes (6,9%), while lesser responses were received in roles involving strategy (2,2%), design and development (3,8%) and HRD management (3,9%). The reason for the low response rate in the latter three roles are due to the instructors' limited decision-making authority in the ETD organisational structure.

The roles that attracted the most responses further indicate that instructors have direct contact with learners in facilitating learning for those involved in a range of machinery, equipment and processes within the technical field. They are probably experienced in some textile production processes, focussing on the practical competence acquisition of learners. This assumption corresponds with the skills audit (1997). (see Appendix A).

- Compared to the other roles, more training officers involve themselves in the design and development of learning materials (44,2%), the evaluation of training and development interventions (44,0%), followed by the design of learning experience in the workplace (47,9%). Less responses were received on formulating strategic ETD plans (23,9%), HRD management functions (33,3 %) and the facilitation of group learning (40,3%).
- Training managers' responsibilities include formulating strategic training plans (56,5 %), managing the ETD function (49,0%) and performing needs analysis for training opportunities (42,2%). Roles involving the actual design and development of learning materials (34,6%), assessment (36,2%) and facilitation activities (37,1%), received fewer responses.
- Line management responsibilities are limited to some of the elements of design and development, facilitation, assessment and administration, most probably where no human resources department exist.
- External consultants are used by individual companies to perform mainly ETD activities in formulating skills development plans (17,4%), designing workplace experience (16,3%) and designing learning materials (15,4%). These consultants do not have much direct contact with learners themselves in terms of support (9,1%), or involvement in administrative functions (9,8%) and the facilitation of individual learning (11,7 %).

Table 11 indicates the number of respondents per occupational level.

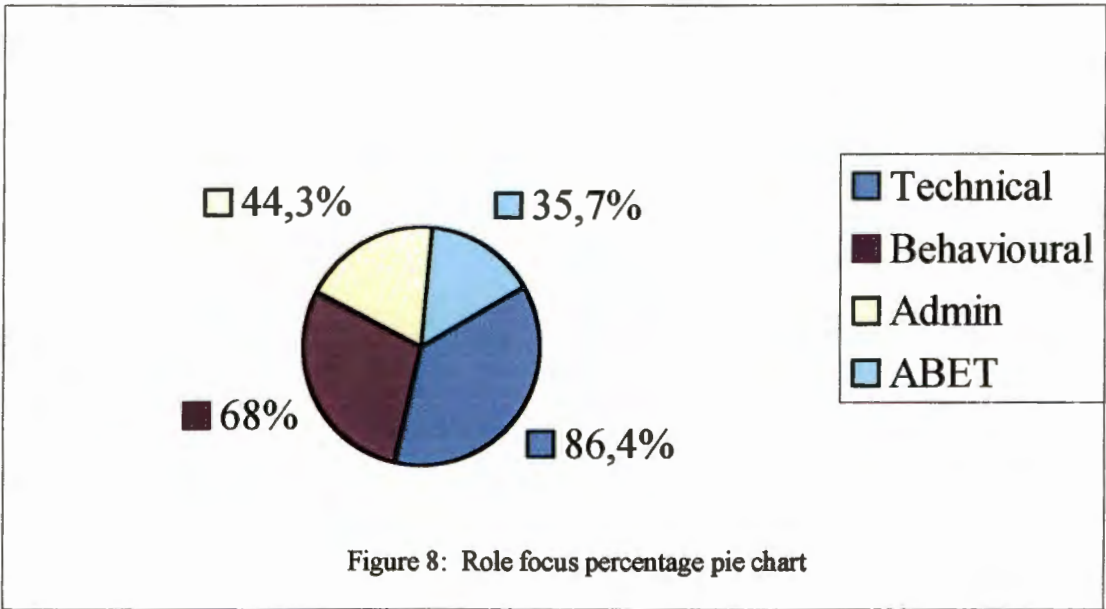
Table 11
Respondents per Occupational Level

Occupational level	Frequency	Percent
Instructor	6	8,6
Training officer	27	38,6
Training manager	28	40,0
Line manager	1	1,4
External consultant	8	11,4

Table 11 shows that most of the respondents are employed at the training officer and training manager occupational levels.

5.1.2 Role focus discussion

Figure 8 reflects the percentage role focus in four training specialisation fields. It should be noticed that a respondent may have more than one role focus.



The following deductions can be made based on the results in Figure 8 and Table 10:

- The focus of ETD is mainly in the technical field (86,4%) which corresponds with the role focus in the skills audit (1997, p. 27). Within this field, a high response rate of 94,8% is reflected in the assessment of competence, followed by learning materials development (90,2%) and needs analysis (88,9%).

Occupational skills and experience in a technical or trades area within a textile manufacturing context appear to be a prerequisite for ETD facilitators. Some 39 mechanician trades are registered within the industry (D. C. Bowen, personal communication, November 2000).

- Behavioural training is mainly the domain of training managers (78,4%), analysing needs for training (77,8%) and formulating training plans (74,5%). The relative lower percentages in counselling learners (55,6%), assessing competence (60,3%) and the design of learning experiences (62,5%) are indicative that the focus is mainly on the teaching of behavioural theory and principles and not sufficient emphasis on the transfer of learning to the workplace.
- With regard to the administrative role focus, needs analysis are performed by most respondents (87,5%), followed by administrative functions itself (65,0%), the formulation of training plans (46,8%), and the provision of learner support services (46,3%).

Irrespective of the role level or role focus, the roles that the ETD facilitators most performed are needs analysis, group learning facilitation and the administration of ETD. Similarly, the roles that received the lowest responses by the ETD facilitators include the formulation of training strategy, designing of learning experiences and the evaluation of the impact of training interventions.

From the above, the conclusion could be made that the roles which directly support learning received the most responses, while those roles which indirectly promotes learning, received fewer responses.

In general, training officers and external consultants focus jointly on the design and development of learning materials for the various mechanical (trades) levels. Training officers and training managers are responsible for facilitation, assessment and evaluation activities, while training managers and external consultants are responsible for formulating training and skills plans, as well as the management of ETD activities. Administration of ETD activities is performed mainly in-house at various ETD occupational levels.

5.2 DESCRIPTIVE STATISTICS WITH REGARD TO INDIVIDUAL COMPETENCIES AND THEIR FUTURE IMPORTANCE

The mean (*M*), standard deviations (*SD*), frequencies and percentages for the individual competencies and their future importance were calculated. These results are reported next.

5.2.1 Mean and standard deviations per competency

Section B of the questionnaire determined the current level of expertise of respondents in a range of generic competencies with a concomitant indication of the importance of each competency for future success. Table 12 provides descriptive statistics of the mean and standard deviations of each competency in both the current level of expertise and importance levels respectively.

Table 12

Descriptive Statistics per Competency

	Current level of expertise					Future importance			
	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max
1. Adult learning	66	4,17	1,13	1	6	3,70	0,46	3	4
2. Instructional design	59	3,81	1,46	0	6	3,67	0,58	2	4
3. Performance gap analysis	66	3,88	1,34	0	6	3,74	0,44	3	4
4. Change management	66	4,00	1,45	0	6	3,67	0,62	2	4
5. Leadership	66	4,58	1,22	1	6	3,77	0,46	2	4
6. Industry awareness	66	4,12	1,44	0	6	3,83	0,45	2	4
7. Buy in / advocacy	66	3,54	1,58	0	6	3,30	0,78	1	4
8. Interpersonal relationship building / collaboration	66	4,61	1,14	0	6	3,70	0,53	2	4
9. Consulting	65	3,88	1,46	0	6	3,49	0,71	2	4
10. Business knowledge	66	3,98	1,40	0	6	3,51	0,64	2	4
11. Systems thinking	65	4,03	1,50	0	6	3,51	0,75	2	4
12. Contracting	66	3,36	1,83	0	6	2,98	0,83	1	4
13. Project management	66	3,43	1,77	0	6	3,38	0,84	1	4
14. Communication	66	4,76	0,93	2	6	3,76	0,46	2	4
15. Programme evaluation	66	4,17	1,30	1	6	3,67	0,48	3	4
16. Learning technology methods	66	4,23	1,30	1	6	3,50	0,66	2	4
17. Audio-visual skills	65	4,03	1,52	0	6	3,18	0,77	1	4
18. Career development knowledge	62	3,84	1,40	0	6	3,29	0,66	2	4
19. Competency identification skills	65	4,43	1,21	1	6	3,71	0,46	3	4
20. Computer competence	65	3,60	1,62	0	6	3,45	0,61	2	4
21. Cost-benefit analysis skills	64	3,03	1,51	0	6	3,00	0,91	1	4
22. Counselling skills	65	4,28	1,21	0	6	3,42	0,90	2	4
23. Data reduction skills	64	3,33	1,76	0	6	3,02	0,93	1	4
24. Delegation skills	63	4,29	1,24	0	6	3,33	0,74	1	4

Table 12

Descriptive Statistics per Competency (continued)

25. Facilities skills	63	3,92	1,57	0	6	3,27	0,75	1	4
26. Feedback skills	64	4,44	1,05	1	6	3,58	0,59	2	4
27. Futuring skills	64	3,25	1,59	0	6	3,34	0,76	2	4
28. Group process skills	65	3,89	1,21	0	6	3,46	0,64	2	4
29. Intellectual versatility	65	4,22	1,29	0	6	3,45	0,69	2	4
30. Library skills	65	3,98	1,51	0	6	3,17	0,84	1	4
37. Presentation skills	65	4,85	1,05	1	6	3,62	0,55	2	4
38. Questioning skills	65	4,52	1,17	1	6	3,40	0,73	1	4
39. Record management skills	64	4,31	1,32	0	6	3,44	0,71	1	4
40. Research skills	64	4,00	1,59	0	6	3,38	0,68	1	4
41. Training and development field understanding	65	4,33	1,25	0	6	3,55	0,64	2	4
42. Training and development techniques understanding	65	4,43	1,21	1	6	3,63	0,52	2	4
43. Writing skills	65	4,31	1,27	0	6	3,55	0,64	1	4
44. Cost analysis / ROI of the distribution methods	64	3,00	1,66	0	6	3,41	0,73	1	4
45. Limitations and benefits of the distribution methods	64	2,98	1,68	0	6	3,19	0,81	1	4
46. Effect of distribution methods on learners	64	3,31	1,48	0	6	3,25	0,80	1	4
47. Integration of distribution methods	64	3,48	1,68	0	6	3,28	0,81	1	4
48. Remote-site co-ordination	62	2,08	1,82	0	6	2,82	1,00	1	4
49. Technology evaluation	64	2,86	1,78	0	6	3,27	0,76	2	4

Table 12

Descriptive Statistics per Competency (continued)

50. Cost analysis / ROI of the presentation methods	63	3,13	1,55	0	6	3,25	0,78	1	4
51. Limitation and benefits of presentation methods	63	3,43	1,52	0	6	3,22	0,73	1	4
52. Effect of presentation methods on learners	63	3,78	1,41	0	6	3,40	0,64	1	4
53. Integration of presentation methods	63	3,86	1,49	0	6	3,41	0,64	1	4

5.2.1.1 The current level of expertise of each competency

On a scale from 0 to 6, each respondent needed to indicate his / her proficiency in a competency. The definitions to assist the respondents are categorised according to a six-point scale for each competency as follows:

- None (0): Possess very little knowledge of, or experience in, applying this competency to ETD practices.
- Basic (1-2): Possess general understanding of key principles and is capable of making simple decisions regarding the proper application of this competency to ETD practices.
- Intermediate (3-4): Possess a comprehensive understanding of key principles and is capable of making complex decisions regarding the application of this competency to ETD practices.
- Advanced (5-6): Possess substantial knowledge and expertise and can work in complex situations that require the application of this competency to ETD practices.

Based on the above scale, the levels of expertise are grouped as follows in the various scoring categories:

- **None (0):** Not one respondent indicated a score in this category.
- **Basic (1-2):** Within the **distribution** category, the competencies reflect those that are needed to deliver training using **electronic** learning technologies. As the textile industry has not advanced sufficiently in the learning technology (information technology) arena, it was expected that the level of expertise would be at the basic level only. Training within the industry is still significantly classroom-based and self-directed through learnerships (D. C. Bowen, CTFL SETA, November 2000).

The following three competencies were identified:

Distribution methods competencies (3)

- 45. Limitation and benefits of the distribution method
- 48. Remote site co-ordination
- 49. Technology evaluation

- **Intermediate (3-4):** The competencies listed within the **general category and the training and development competency** category are those competencies associated with the training and development cycle, and competencies required which are broader than the specificities of particular jobs roles or the workplace.

In the **general competency** category, the results indicate that all 16 competencies were scored at the intermediate level. This would have been the minimum level of expertise expected from the sample when taking into consideration the average length of service (14,5 years) of ETD facilitators in the industry as revealed in the skills audit (1997) (see Appendix C).

The following 50 competencies were identified at the intermediate level:

General competencies (16)

1. Adult learning
2. Instructional design
3. Performance gap analysis
4. Change management
5. Leadership
6. Industry awareness
7. Buy in / advocacy
8. Interpersonal relationship building / collaboration
9. Consulting
10. Business knowledge
11. Systems thinking
12. Contracting
13. Project management
14. Communication
15. Programme evaluation
16. Learning technology methods

Training and development competencies (27)

17. Audio-visual skills
18. Career development knowledge
19. Competency identification skills
20. Computer competence
21. Cost-benefit analysis skills
22. Counselling skills
23. Data reduction skills
24. Delegation skills
25. Facilities skills
26. Feedback skills

27. Futuring skills
28. Group process skills
29. Intellectual versatility
30. Library skills
31. Model building skills
32. Objectives preparation skills
33. Organisation behaviour understanding
34. Organisation understanding
35. Performance observation skills
36. Personnel / human resources field understanding
37. Presentation skills
38. Questioning skills
39. Records management skill
40. Research skills
41. Training and development field understanding
42. Training and development techniques understanding
43. Writing skills

Distribution method competencies (3)

44. Cost Analysis / return on investment of the distribution method
46. Effect of distribution method on learners
47. Integration of distribution method

Presentation method competencies (4)

50. Cost analysis / return on investment of the presentation method
51. Limitations and benefits of presentation the methods
52. Effect of presentation methods on learners
53. Integration of presentation method

Advanced (5-6): No respondent indicated to have substantial knowledge and expertise to work in complex situations that require the application of competencies to ETD practices.

5.2.1.2 The level of future importance of each competency

On a scale of 1 to 4, each respondent needed to indicate the future importance of competencies:

- 1 : Not important for future success
- 2 : Somewhat important for future success
- 3 : Important for future success
- 4 : Very important for future success

No responses were recorded at **point 1** of the four-point scale and confirmed that no respondent viewed any competency not to be important for future success.

At **point 2** of the four-point scale, the following competencies were identified as somewhat important to future success:

- General competencies (1)
 - 12. Contracting
- Distribution methods competencies (1)
 - 6. Remote-site co-ordination

Remote-site co-ordination, which involves co-ordinating the installation and maintenance of distribution technology at remote sites, attracted the lowest score of all competencies. This is attributable to the fact that the surveyed companies are all single site operations, and no remote sites exist (D.C. Bowen, personal communication, November 2000). **Contracting** also received a low score. In discussions with executive members of the CTFL SETA, the possible reason for this appeared to be that ETD work are performed by full-time ETD staff and that outsourcing is not used itself in the industry. This should not be confused with external consultants who participated in the survey. External consultants are employed by the CTFL SETA as skills

development facilitators to provide a service to companies under control and guidance of the SETA.

At **point 3** of the four-point scale, the following competencies were identified as important for future success:

General competencies (15)

1. Adult learning
2. Instructional design
3. Performance gap analysis
4. Change management
5. Leadership
6. Industry awareness
7. Buy-in advocacy
8. Interpersonal relationship building / collaboration
9. Consulting
10. Business knowledge
11. Systems thinking
13. Project management
14. Communication
15. Programme evaluation
16. Learning technology methods

Training and development competencies (27)

17. Audio-visual skills
18. Career development knowledge
19. Competency identification skills
20. Computer competence
21. Cost-benefit analysis skills
22. Counselling skills
23. Data reduction skills
24. Delegation skills

25. Facilities skills
26. Feedback skills
27. Futuring skills
28. Group process skills
29. Intellectual versatility
30. Library skills
31. Model building skills
32. Objectives preparation skills
33. Organisation behaviour understanding
34. Organisation understanding
35. Performance observation skills
36. Personnel / human resources field understanding
37. Presentation skills
38. Questioning skills
39. Records management skills
40. Research skills
41. Training and development field understanding
42. Training and development techniques understanding
43. Writing skills

Distribution method competencies (5)

44. Cost analysis / return on investment of the distribution methods
45. Limitations and benefits of the distribution methods
46. Effect of distribution method on learners
47. Integration of distribution methods
49. Technology evaluation

Presentation method competencies (4)

50. Cost analysis / return on investment of the presentation methods
51. Limitations and benefits of the presentation methods
52. Effect of presentation method on learners
53. Integration of presentation methods

The competencies that were viewed as the most important are industry awareness ($M = 3,83$), leadership ($M = 3,77$) and communication ($M = 3,76$). All three competencies indicate a broader knowledge basis than the ETD roles itself, and are integrated across a broad foundation as underpinning ETD facilitator performance.

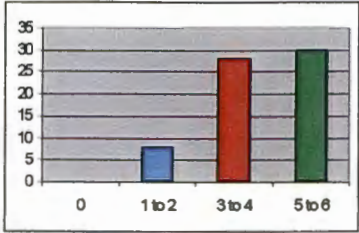
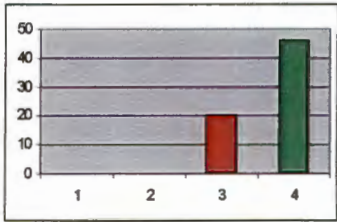
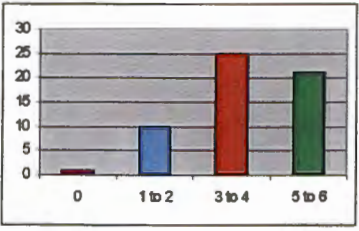
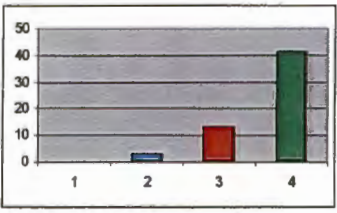
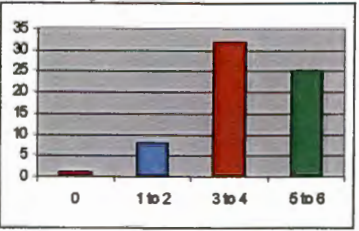
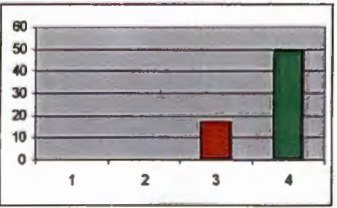
At **point 4** no score was obtained. However, seven competencies were scored between 3,5 and 3,83 which could for the purpose of this research be categorised as very important for future success in the ETD field. They are:

1. Adult learning
2. Instructional design
5. Leadership
6. Industry awareness
7. Interpersonal relationship building collaboration
10. Business knowledge
11. Systems thinking
14. Communication
15. Programme evaluation
16. Learning technology methods
19. Competency identification skill
26. Feedback skills
37. Business knowledge
41. Training and development field understanding
42. Training and development techniques understanding
43. Writing skills

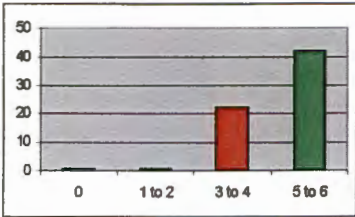
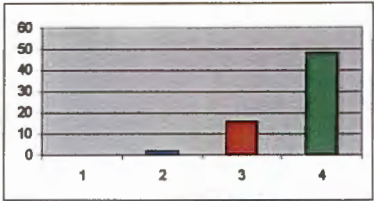
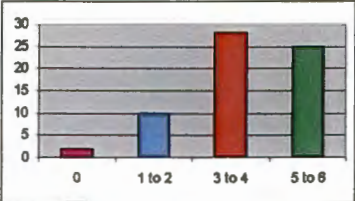
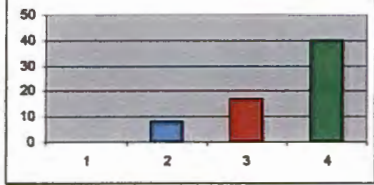
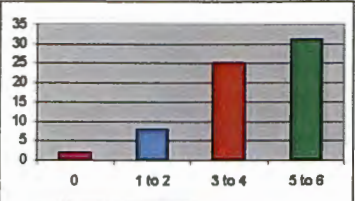
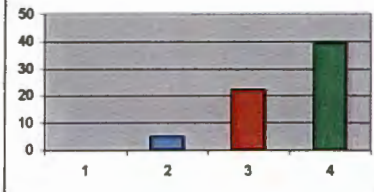
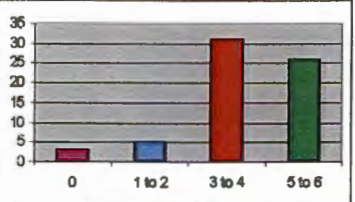
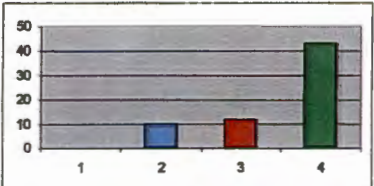
5.2.2 Frequencies and percentages per competency

As at paragraph 5.2.1, the data is reported in the form of frequencies (*F*) and percentages (%) (see Table 13). The responses per competency are also reflected as histograms in both current levels of expertise and importance levels for future success.

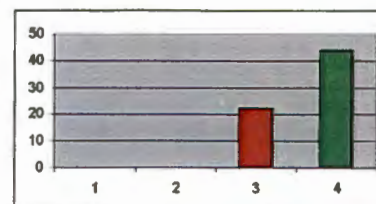
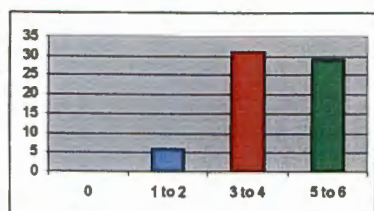
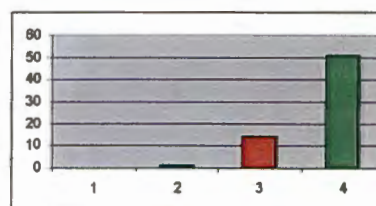
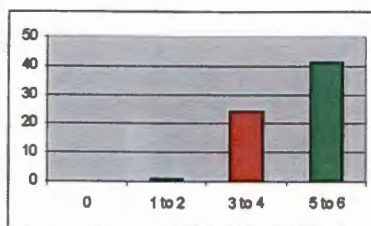
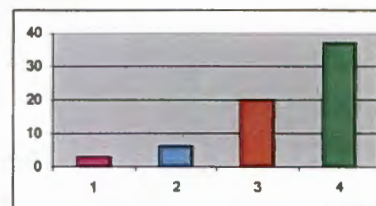
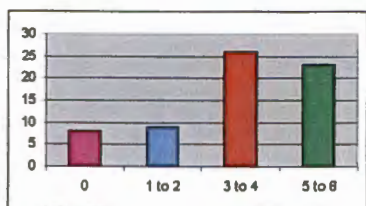
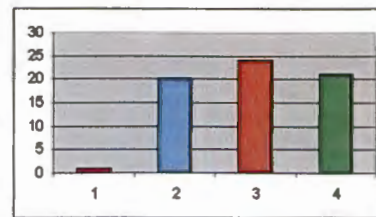
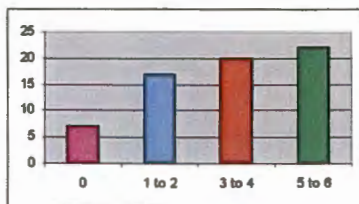
Table 13
Descriptive Statistics of Current Level of Expertise and Importance Levels for Future Success per Competency

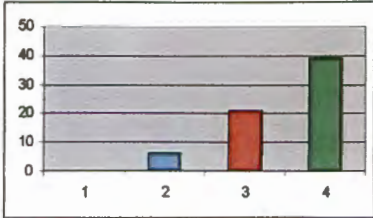
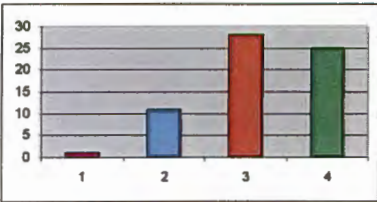
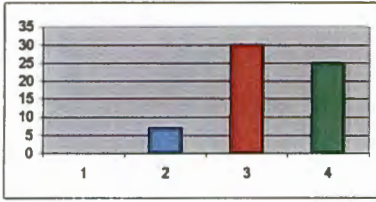
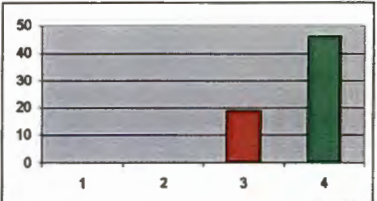
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
1. Adult learning 	0	0	0	3	20	30,3
	1	1	1,5	4	46	69,7
	2	7	10,6			
	3	6	9,0			
	4	22	33,3			
	5	26	39,4			
	6	4	6,1			
2. Instructional design 	0	1	1,8	2	3	5,3
	1	4	7,0	3	13	22,8
	2	6	10,5	4	41	71,9
	3	9	15,8			
	4	16	28,1			
	5	16	28,1			
	6	5	8,7			
3. Performance gap analysis 	0	1	1,5	3	17	25,8
	1	3	4,6	4	49	74,2
	2	5	7,6			
	3	15	22,7			
	4	17	25,8			
	5	20	30,3			
	6	5	7,5			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
4. Change management	0	2	3,0	2	5	7,6
	1	2	3,0	3	12	18,2
	2	5	7,6	4	49	74,2
	3	13	19,7			
	4	15	22,7			
	5	21	31,9			
	6	8	12,1			
5. Leadership	0	0	0	2	1	1,5
	1	1	1,5	3	13	19,7
	2	5	7,6	4	52	78,8
	3	5	7,6			
	4	13	19,7			
	5	28	42,4			
	6	14	21,2			
6. Industry awareness	0	3	4,6	2	2	3,0
	2	5	7,6	3	7	10,6
	3	10	15,1	4	57	86,4
	4	17	25,8			
	5	22	33,3			
	6	9	13,6			
7. Buy in / Advocacy	0	5	7,6	1	3	4,6
	1	3	4,6	2	4	6,0
	2	5	7,6	3	29	43,9
	3	16	24,2	4	30	45,5
	4	16	24,2			
	5	17	25,8			
	6	4	6,1			

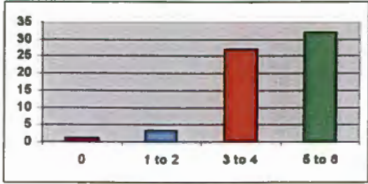
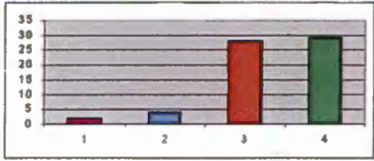
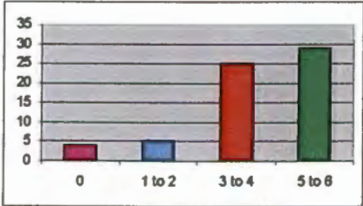
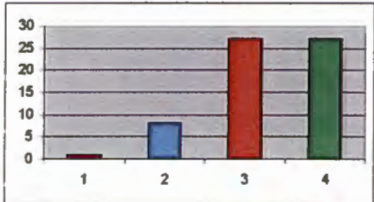
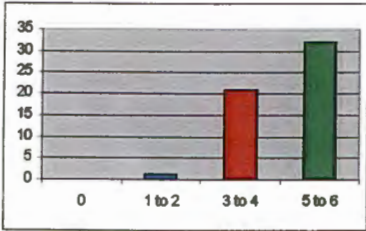
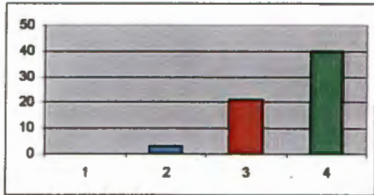
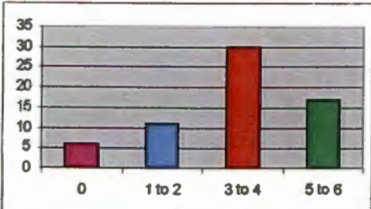
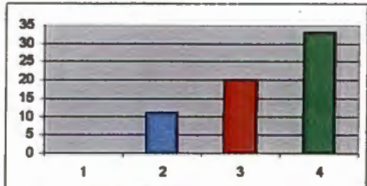
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
8. Interpersonal relationship building 	0	1	1,5	2	2	3,0
	1	1	1,5	3	16	24,2
	3	7	10,6	4	48	72,8
	4	15	22,7			
	5	30	45,5			
	6	12	18,2			
9. Consulting 	0	2	3,1	2	8	12,3
	1	2	3,1	3	17	26,2
	2	8	12,3	4	40	61,5
	3	10	15,4			
	4	18	27,7			
	5	18	27,7			
10. Business knowledge 	0	2	3,0	2	5	7,6
	1	1	1,5	3	22	33,3
	2	7	10,6	4	39	59,1
	3	12	18,2			
	4	13	19,7			
	5	26	39,4			
11. Systems thinking 	6	5	7,6	2	10	15,4
	0	3	4,6	3	12	18,5
	1	1	1,5	4	43	66,1
	2	4	6,0			
	3	12	18,5			
	4	19	29,2			
	5	15	23,1			
	6	11	16,9			

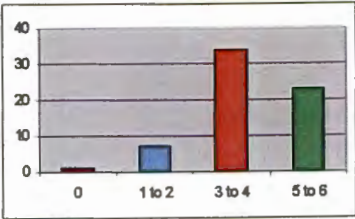
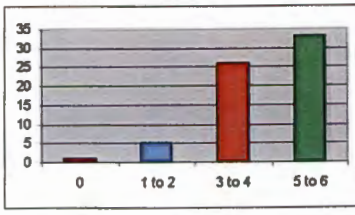
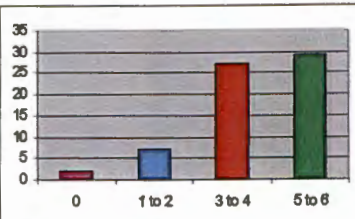
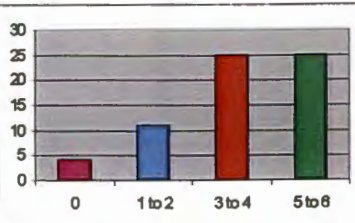
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
12. Contracting	0	7	10,6	1	1	1,5
	1	3	4,6	2	20	30,3
	2	14	21,2	3	24	36,4
	3	6	9,1	4	21	31,8
	4	14	21,2			
	5	15	22,7			
	6	7	10,6			
13. Project management	0	8	12,1	1	3	4,6
	1	4	6,1	2	6	9,1
	2	5	7,6	3	20	30,3
	3	9	13,6	4	37	56,1
	4	17	25,8			
	5	20	30,3			
	6	3	4,6			
14. Communication	0	0	0	2	1	1,5
	2	1	1,5	3	14	21,2
	3	4	6,1	4	51	77,3
	4	20	30,3			
	5	26	39,4			
	6	15	22,7			
15. Programme evaluation	0	0	0	3	22	33,3
	1	3	4,6	4	44	66,7
	2	3	4,6			
	3	13	19,7			
	4	18	27,3			
	5	19	28,8			
	6	10	15,6			



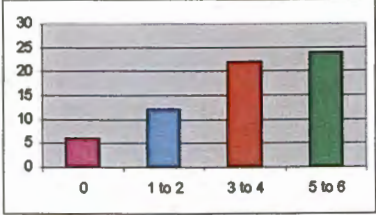
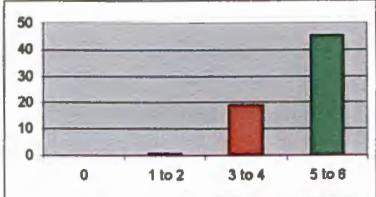
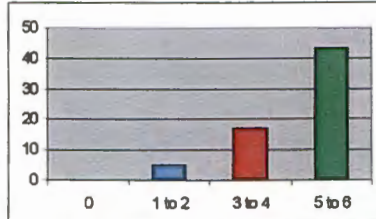
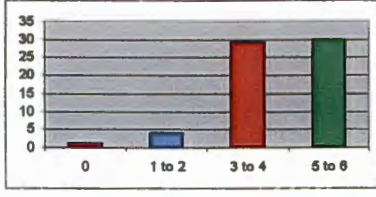
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
16. Learning technology methods	0	0	0	2	6	9,1
	1	2	3,0	3	21	31,8
	2	4	6,1	4	39	59,1
	3	13	19,7			
	4	17	25,8			
	5	18	27,3			
	6	12	18,2			
17. Audio-visual skills	0	3	4,6	1	1	1,5
	1	1	1,5	2	11	16,9
	2	5	7,7	3	28	43,1
	3	11	17,0	4	25	38,5
	4	18	27,7			
	5	16	24,6			
	6	11	16,9			
18. Career development knowledge	0	2	3,2	2	7	11,3
	1	3	4,8	3	30	48,4
	2	4	6,5	4	5	40,3
	3	12	19,4			
	4	18	29,0			
	5	19	30,7			
	6	4	6,4			
19. Competency identification skills	0	0	0	3	19	29,2
	1	2	3,1	4	46	70,8
	2	4	6,1			
	3	5	7,7			
	4	17	26,2			
	5	27	41,5			
	6	10	15,4			

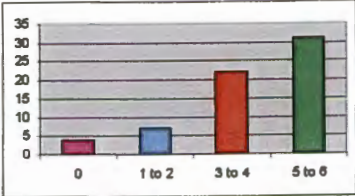
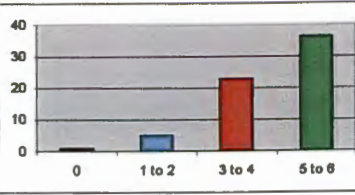
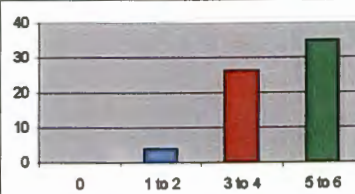
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
20. Computer competence	0	3	4,6	2	4	6,1
	1	6	9,2	3	28	43,1
	2	7	10,8	4	33	50,8
	3	10	15,4			
	4	16	24,6			
	5	18	27,7			
	6	5	7,7			
21. Cost benefit analysis skills	0	6	9,4	1	5	7,8
	1	6	9,4	2	11	17,2
	2	6	9,4	3	27	42,2
	3	18	28,1	4	21	32,8
	4	19	29,7			
	5	8	12,5			
	6	1	1,5			
22. Counselling skills	0	1	1,5	2	8	12,3
	2	1	1,5	3	22	33,9
	3	17	26,2	4	35	53,8
	4	15	23,1			
	5	21	32,3			
	6	10	15,4			
23. Data reduction skills	0	8	12,5	1	6	9,4
	1	4	6,3	2	9	14,0
	2	5	7,8	3	27	42,2
	3	11	17,2	4	22	34,4
	4	18	28,1			
	5	14	21,9			
	6	4	6,2			

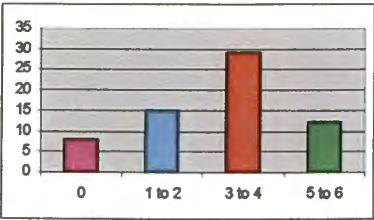
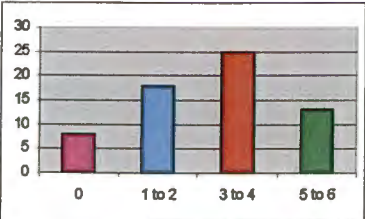
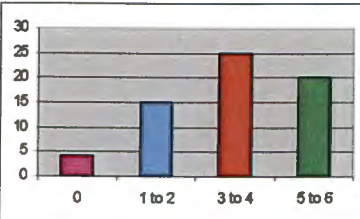
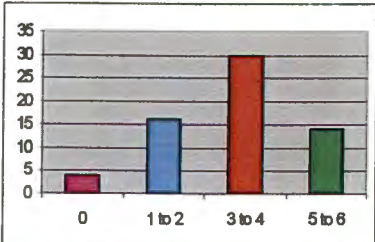
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
24. Delegation skills	0	1	1,6	1	2	3,2
	2	3	4,8	2	4	6,4
	3	13	20,6	3	28	44,4
	4	14	22,2	4	29	46,0
	5	23	36,5			
	6	9	14,3			
						
25. Facilitating skills	0	4	6,4	1	1	1,5
	1	2	3,2	2	8	12,7
	2	3	4,8	3	27	42,9
	3	12	19,0	4	27	42,9
	4	13	20,6			
	5	23	36,5			
	6	6	9,5			
						
26. Feedback skills	0	0	0	2	3	4,7
	1	1	1,6	3	21	32,8
	3	11	17,2	4	40	62,5
	4	20	31,2			
	5	22	34,4			
	6	10	15,6			
						
27. Futuring skills	0	6	9,4	2	11	17,2
	1	4	6,3	3	20	31,2
	2	7	10,9	4	33	51,6
	3	16	25,0			
	4	14	21,9			
	5	16	25,0			
	6	1	1,5			
						

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
28. Group process skills 	0	1	1,5	2	5	7,7
	1	1	1,5	3	25	38,5
	2	6	9,2	4	35	53,8
	3	14	21,6			
	4	20	30,8			
	5	20	30,8			
	6	3	4,6			
29. Intellectual versatility 	0	1	1,5	2	7	10,8
	1	1	1,5	3	22	33,8
	2	4	6,2	4	36	55,4
	3	12	18,5			
	4	14	21,5			
	5	25	38,5			
	6	8	12,3			
30. Library skills 	0	2	3,1	1	1	1,5
	1	3	4,6	2	15	23,1
	2	4	6,2	3	21	32,3
	3	14	21,5	4	28	43,1
	4	13	20,0			
	5	20	30,8			
	6	9	13,8			
31. Model-building skills 	0	4	6,2	1	1	1,5
	1	5	7,7	2	9	13,9
	2	6	9,2	3	25	38,5
	3	14	21,5	4	30	46,1
	4	11	16,9			
	5	22	33,9			
	6	3	4,6			

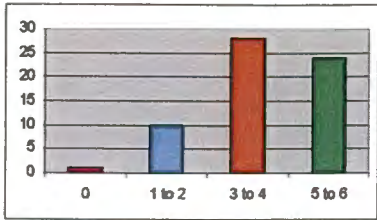
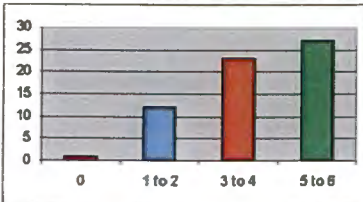
Competency	Current level			Future		
	Scale	F	%	Scale	F	%
32. Objectives preparation skills	0	5	7,7	2	7	10,8
	1	1	1,6	3	21	32,3
	2	2	3,1	4	37	56,9
	3	11	16,9			
	4	16	24,6			
	5	26	40,0			
	6	4	6,1			
33. Organisation behaviour understanding						
	0	2	3,1	1	1	1,5
	1	2	3,1	2	11	16,9
	2	10	15,4	3	20	30,8
	3	15	23,1	4	33	50,8
	4	21	32,3			
	5	14	21,5			
34. Organisation behaviour	6	1	1,5			
	0	3	4,6	1	2	3,1
	1	2	3,1	2	7	10,9
	2	7	10,9	3	24	37,5
	3	8	13,0	4	31	48,5
	4	19	29,7			
35. Performance observation skills	5	24	37,5			
	6	1	1,6			
	0	1	1,5	2	9	12,3
	1	1	1,5	3	27	41,5
	2	7	10,8	4	30	46,2
	3	17	26,2			
	4	18	27,7			
	5	20	30,8			
	6	1	1,5			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
36. Personnel / HR field understanding 	0	6	9,4	1	1	1,6
	1	4	6,2	2	4	6,2
	2	8	12,5	3	29	45,3
	3	8	12,5	4	30	46,9
	4	14	21,9			
	5	18	28,1			
	6	6	9,4			
37. Presentation skills 	0	0	0	2	2	3,1
	1	1	1,6	3	21	32,3
	3	6	9,2	4	42	64,6
	4	13	20,0			
	5	26	40,0			
	6	19	29,2			
38. Questioning skills 	0	0	0	1	1	1,6
	1	2	3,1	2	6	9,2
	2	3	4,6	3	24	36,9
	3	6	9,2	4	34	52,3
	4	11	16,9			
	5	34	52,3			
	6	9	13,9			
39. Records management skills 	0	1	1,6	1	1	1,6
	1	1	1,6	2	5	7,8
	2	3	4,7	3	23	35,9
	3	10	15,6	4	35	54,7
	4	19	29,7			
	5	17	26,5			
	6	13	20,3			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
40. Research skills 	0	4	6,2	1	1	1,5
	2	7	10,9	2	4	6,3
	3	10	15,6	3	29	45,3
	4	12	18,8	4	30	46,9
	5	22	34,4			
	6	9	14,1			
41. Training and development field understanding 	0	1	1,5	2	5	7,7
	2	5	7,7	3	19	29,2
	3	9	13,9	4	41	63,1
	4	14	21,5			
	5	27	41,5			
	6	9	13,9			
42. Training and development techniques understanding 	0	0	0	2	1	1,5
	1	1	1,5	3	22	33,9
	2	3	4,6	4	42	64,6
	3	11	16,9			
	4	15	23,1			
	5	22	33,9			
	6	13	20,0			
43. Writing skills 	0	1	1,5	1	1	1,5
	1	1	1,5	2	2	3,1
	2	2	3,1	3	22	33,9
	3	12	18,5	4	40	61,5
	4	17	26,2			
	5	21	32,3			
	6	11	16,9			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
44. Cost analysis / ROI of the distribution methods 	0	8	12,5	1	1	1,6
	1	3	4,7	2	6	9,4
	2	12	18,7	3	23	35,9
	3	14	21,9	4	34	53,1
	4	15	23,4			
	5	9	14,1			
	6	3	4,7			
45. Limitations and benefits of distribution methods 	0	8	12,5	1	1	1,6
	1	3	4,7	2	13	20,3
	2	15	23,4	3	23	35,9
	3	9	14,1	4	27	42,2
	4	16	25,0			
	5	11	17,2			
	6	2	3,1			
46. Effect of distribution methods on learners 	0	4	6,2	1	1	1,6
	1	5	7,8	2	11	17,2
	2	10	15,6	3	23	35,9
	3	8	12,5	4	29	45,3
	4	17	26,6			
	5	14	21,9			
	6	6	9,4			
47. Integration of distribution methods 	0	4	6,2	1	2	3,1
	1	2	3,1	2	8	12,5
	2	14	21,9	3	24	37,5
	3	10	15,6	4	30	46,9
	4	20	31,3			
	5	12	18,8			
	6	2	3,1			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
48. Remote-site co-ordination	0	16	25,8	1	6	9,7
	1	12	19,4	2	19	30,7
	2	11	17,7	3	17	27,4
	3	7	11,3	4	20	32,2
	4	9	14,5			
	5	4	6,5			
	6	3	4,8			
49. Technology evaluation	0	10	15,6	2	12	18,8
	1	7	10,9	3	23	35,9
	2	8	12,5	4	29	45,3
	3	9	14,1			
	4	20	31,3			
	5	7	10,9			
	6	3	4,7			
50. Cost analysis / ROI of presentation methods	0	3	4,8	1	2	3,1
	1	8	12,7	2	7	11,1
	2	11	17,5	3	27	42,9
	3	13	20,6	4	27	42,9
	4	14	22,2			
	5	12	19,0			
	6	2	3,2			
51. Limitation and benefits of presentation methods	0	4	6,3	1	1	1,6
	1	3	4,8	2	8	12,7
	2	10	15,9	3	30	47,6
	3	10	15,9	4	24	38,1
	4	19	30,2			
	5	15	23,8			
	6	2	3,1			

Competency	Current level			Future		
	Scale	F	%	Scale	F	%
52. Effect of presentation methods on learners 	0	1	1,6	1	1	1,6
	1	6	9,5	2	2	3,2
	2	4	6,3	3	31	49,2
	3	10	15,9	4	29	46,0
	4	18	28,6			
	5	22	34,9			
	6	2	3,2			
53. Integration of presentation methods 	0	1	1,6	1	1	1,6
	1	5	7,9	2	2	3,2
	2	7	11,1	3	30	47,6
	3	8	12,7	4	30	47,6
	4	15	23,9			
	5	22	34,9			
	6	5	7,9			

With reference to the number of responses in the **current level of expertise column**, the respondents' scores dominate at the intermediate (3 – 4) and advanced (5 – 6) levels. 27 out of 53 competencies were identified at the intermediate level (3 – 4), while 25 out of 53 competencies were identified at the advanced level (5 – 6).

Furthermore, the majority of competencies (45 out of 53) were indicated as very important for future success and the balance (8 out of 53) were scored as important for future success. The above results clearly indicate that the respective competencies are important for future success, irrespective of the current level of expertise.

However, some competencies within the current level of expertise attracted low scores which need to be explained:

Although scoring dominates at the intermediate level, more respondents indicated that their level of expertise was still basic than those respondents who expressed confidence at the advanced level. These competencies include: cost benefit analysis skills, cost analysis / return on investment of distribution methods, limitations and benefits of distribution methods, effect of distribution methods and technology evaluation.

- **General competencies (1-16)**

Instructional design, contracting and project management attracted 30% or more of the scores of having both very little knowledge and general understanding expertise levels.

- **Training and development competencies (17-43)**

Computer competence, cost benefit analysis skills, data reduction skills, futuring skills, and personnel / human resources field understanding, attracted 30% or more of the scores where respondents indicated very little or general understanding expertise levels.

- **Distribution method competencies (44 – 49)**

Five out of six competencies in this category were scored at the intermediate level. In general, the levels of expertise in the distribution methods category are the lowest of in comparison with the other three competency categories. A relative high percentage of respondents (34%) has indicated to have very little knowledge of the remote site coordination competency. The comments revealed previously are also relevant here as the majority of companies still reflect single site characteristics.

However, despite the low level of expertise in this category, all six competencies were identified as very important for future success.

• **Presentation methods competencies (50 – 53)**

All current levels of expertise are at the intermediate level, except for the integration of presentation methods where the current of level of expertise is reflected at the advanced level of expertise. As regard to their future importance, the respondents scored the competencies as important only.

The overall results indicate that the respondents viewed the identified competencies to be relevant in the ETD field. It must be noted, however, that the level of expertise in a specific competency is purely based on the respondent’s own assessment decision, and does not reflect an assessment of competence by an accredited assessor where sufficient evidence is collected to demonstrate that the respondent can perform to pre-defined performance standards.

5.3 RELIABILITY AND CONSTRUCT VALIDITY STATISTICS OF ROLES AND OUTCOMES

Cronbach-Alpha coefficients were used to determine the internal consistency of Section C of the measuring instrument. Table 14 reflects the internal consistency and construct validity statistics.

Table 14
Reliability and Construct Validity of Roles and Outcomes

Factor 1		Load	Mean r	α
Planning learning	• Coach learning	0,82	0,65	0,87
	• Plan learning events	0,94		
	• Plan learning programmes	0,90		
	• Plan a curriculum	0,78		
Developing materials	• Prepare learning aids	0,89	0,79	0,92
	• Develop training materials	0,96		
	• Co-ordinate design of training materials	0,93		

Table 14

Section C: Reliability and Construct Validity Statistics (continued)

Facilitating learning	- Facilitate targeted skills development - Facilitate learning through various methodologies - Facilitate learning through integrating methodologies	0,86 0,96 0,96	0,79	0,92
Assessing learning	- Conduct an assessment - Design integrated assessments - Moderate an assessment - Manage a quality assurance system	0,90 0,92 0,97 0,75	0,71	0,90
Guiding and counselling	- Advise and refer learners - Guide and support learners - Guide and council learners	0,97 0,98 0,97	0,92	0,97
Managing learning	- Supervise a course - Supervise a skills programme - Manage a learnership - Manage a quality assurance system	0,87 0,92 0,86 0,86	0,69	0,90
Evaluating learning	- Evaluate a course - Evaluate a learnership / programme - Evaluate learning systems	0,91 0,95 0,95	0,82	0,93
Conducting research	- Conduct elementary research in ETD / occupation - Design, and conduct research - Design, conduct and co-ordinate research	0,97 0,98 0,98	0,93	0,98
Occupational development	- Identify recent changes / implications on won occupation and incorporate in position - Analyse recent changes / implications on ETD roles and incorporate in position - Analyse recent changes / implications on ETD practices and incorporate in position	0,96 0,98 0,97	0,92	0,97

The alpha coefficient give thus an indication whether the items measure the same construct. If $\alpha > 0,80$ it indicates an acceptable internal consistency (Nunnally & Bernstein, 1994). The alpha coefficients of Section C vary between 0,87 and 0,98. It can be deduced that the measuring instrument contains an acceptable internal consistency. However, the mean r indicates a high correlation between the items, which may be attributed to the specificity of the dimensions that respondents reacted to. The factor values vary between 0,81 and 0,99 which indicate the construct validity of the factors compared with a lowest limit of 0,35 (Clark & Watson, 1995).

5.4 DESCRIPTIVE STATISTICS REFLECTING MEAN AND STANDARD DEVIATIONS OF OUTCOMES

All the outcomes in each nine ETD roles are arranged from basic knowledge, skills and values to more advanced and specialised outcomes. Proficiency in advanced outcomes assumes proficiency in preceeding basic and intermediate outcomes. Table 15 reflects the mean (*M*) and standard deviations (*SD*) in each outcome according to ETD roles.

Table 15
Descriptive Statistics Reflecting Means and Standard Deviations of Outcomes

Roles	Outcomes	<i>M</i>	<i>SD</i>	Min	Max
Plan learning	• Coach learning	4,72	1,33	0	6
	• Plan learning events	4,48	1,73	0	6
	• Plan learning programmes	4,45	1,63	0	6
	• Plan a curriculum	3,63	2,04	0	6
Develop materials	• Prepare learning aids	4,42	4,49	0	6
	• Develop training materials	4,16	1,78	0	6
	• Co-ordinate design of training materials	3,73	1,89	0	6
Facilitate learning	• Facilitate targeted skills development	4,38	1,70	0	6
	• Facilitate learning through various methodologies	4,27	1,71	0	6
	• Facilitate learning through integrating methodologies	3,95	1,89	0	6
Assess learning	• Conduct an assessment	4,27	1,52	0	6
	• Design integrated assessments	3,64	1,77	0	6
	• Moderate an assessment	3,69	1,71	0	6
	• Manage a quality assurance system	3,19	2,03	0	6
Guide and Counsel	• Advise and refer learner	4,69	1,22	1	6
	• Guide and support learners	4,67	1,28	1	6
	• Guide and counsel learners	4,61	1,27	1	6
Manage learning	• Supervise a course	4,54	1,46	1	6
	• Supervise a skills programme	4,36	1,57	0	6
	• Manage a learnership	3,79	1,65	0	6
	• Manage a quality assurance system	3,81	1,76	0	6

Table 15

*Descriptive Statistics Reflecting Means and Standard Deviations of Outcomes**(continued)*

Evaluate learning	• Evaluate a course	4,28	1,46	0	6
	• Evaluate a learnership / programme	3,78	1,74	0	6
	• Evaluate learning systems	3,69	1,83	0	6
Conduct research	• Conduct elementary research in ETD / occupation	3,13	1,83	0	6
	• Design and conduct research	3,04	1,83	0	6
	• Design, conduct and co-ordinate research	2,82	1,92	0	6
Occupational development	• Identifying recent changes / implications on own occupation and incorporating in position	3,61	1,72	0	6
	• Analysing recent changes / implications on ETD roles and incorporating in position	3,42	1,79	0	6
	• Analysing recent changes / implications on ETD practices and incorporating in position	3,30	1,87	0	6

- In all nine roles reflected in Table 15, the level of expertise reflects a level between basic and advanced, which indicates that respondents possess general understanding of key principles and have made considerable progress toward achieving the standards equivalent to the NQF 5 level. The mean (M) decreases as the complexity of the standard increases, for example -

Prepare learning aids 4,42

Develop training materials 4,16

Co-ordinate design of training materials 3,73

Using the above example, and with reference to Appendix A, the complexity issue can be explain more thoroughly. Preparing learning aids is a basic competence required to contribute to achievements at course level; developing learning materials is an advancing competence required at a higher level to contribute significantly to achievements at the level of learning programmes; and co-ordinating the design of training materials is an advanced competence required to contribute to achievements within or across organisations. Analysing the means reflected in the example above, the respondents indicated a higher mean or level of

competence in the basic outcome, and this level of competence decreases as the outcome increases in complexity.

- When the ETD roles are further analysed in order to determine their rank order, the overall mean of the individual outcomes for each role was calculated. The following roles reflected the highest means:

- Guide and counsel
- Plan learning
- Facilitate learning

The relative high averages in the guidance and counselling, planning of learning and the facilitation of learning roles could be explained as follows:

- In the guide and counsel role and its outcomes, which essentially deals with learner support, one could understand the high scores at the basic and intermediate outcomes levels which include giving advice regarding career progression and information on learning programmes. However, expertise at the advanced level requires professional qualifications in dealing with bio-psychosocial problems of learners. In this instance, the expertise level could have been overstated.
- With regard to the planning of learning, much attention centres around the development of workplace skills plans prompted by the Skills Development Act, and could have influenced the respondents' scoring in these particular outcomes.
- The facilitation of learning role is the core practice to give effect to the workplace skills plans of organisations and is a critical element within the training and development cycle.

Similarly, the relative lower averages in conducting research, occupational development and evaluation of training roles can be explained as follows:

- The conducting of research work is a new learning outcome for ETD facilitators, aimed at improving the professionalisation of ETD practices.
- The occupational development role is also a new learning outcome for ETD facilitators, and require continuous updating of chosen occupations within the ETD field as a result of forces and influences on ETD, and their impact on the practice of ETD roles.
- From the statistics from Section A, it was evident that the evaluation of training impact is reserved for ETD facilitators at training manager level. The concept of a learnership is new to the industry and will require some time before merit and worth value-assessments will provide the data to confirm whether learnerships are supporting learning, and whether the learnership concept fit in within the broader strategy of training interventions.

5.5 CHAPTER SUMMARY

In this chapter the results of the empirical study were presented and discussed. In Section A of the questionnaire/role level and focus statistics were reported, while Section B reflected the level of expertise and future importance of each competency. In Section C the Cronbach-alpha coefficients (α) was used to determine the internal consistency of the measuring instrument.

Thus, the last two specific objectives set out at the beginning of the study have been reached. Consequently, the last two research objectives have also been answered.

Chapter 6 offers conclusions and recommendations.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

The chapter focuses on the conclusions of the research. Furthermore, the limitations are highlighted and recommendations are made. Finally, some future research options are also offered.

6.1 CONCLUSIONS

Conclusions are made based on the specific theoretical objectives and the results obtained during the empirical study.

6.1.1 Conclusions regarding the specific theoretical objectives

Within the framework of ETD legislation, **outcomes-based education and training (OBE)** was researched from the literature, as well as its institutional framework and related processes. This was necessary, as ETD facilitators need to understand the ways in which the legislative framework in the country is trying to support the outcomes-based learning process. The effective management and implementation of the new ETD system will not only assist textile companies to achieve the critical skills development priorities identified in their sector skills plan (SSP), but will also provide the industry with opportunities to make its own textile qualifications framework “alive” and to move towards a fully integrated approach to learning based on learning achievements.

The starting point of OBE is the definition of agreed outcomes of learning. These outcomes could range from generic to highly specialised outcomes. It must be agreed upon by all stakeholders in order to meet the diverse needs of individuals and society, including business, tertiary institutions, cultural organisations and Government. Once these outcomes have been agreed on, two key roles emerged. The first is that learning programmes must be designed and implemented to enable learners to become competent relative to these outcomes. Secondly, appropriate assessment methods must

be designed and implemented to determine whether learners have in fact reached these outcomes. Information gathered from such assessment activities will enable ETD facilitators to make decisions regarding future steps in the learning programme, ranging from certification to remedial teaching / training.

The **conclusion** is made that the new outcomes-based education and training approach is a definite shift from a curriculum where content was the main component, to a curriculum where the achievement of critical and specific outcomes is the driving force. It is also clear that ETD facilitators should ensure that they are familiar with these new trends to enable them to contribute to the vision of setting a platform for lifelong learning. This should not be only for the learners, but also for the facilitators themselves in the different roles; the required competencies to enact these roles; as well as the outcomes to be achieved at different levels of applied competence.

The **relationship between roles, competencies and outcomes** in the ETD field was found to be applicable to a wide, diverse range of ETD practices. It applied to mainly three areas in the ETD acronym education, training and development. The term “ETD facilitator or practitioner” was developed to describe a broad range of people directly or indirectly involved in activities that support learning. It was identified that the workplace, rather than the formal sector or the informal sector, would become the area for major ETD innovation and development over the next decade, which has been prompted by the Skills Development Act. Hence the particular pressure on the private sector for ETD recognition, qualification, quality appraisal and career opportunities for a range of ETD practices. These are part role and part job in performance, as well in for those that might develop full-job status (ETD Practices Project, 1997).

The concept of a compulsory core was developed in 1994 by the National Training Board to provide a broad foundation of **expertise** as underpinning ETD facilitator performance and is a basis for progression. The core comprises three areas:

- Occupational and subject matter expertise, including accredited qualifications, applied occupational competence or work experience and a wider contextualisation

of a particular field of work (the appropriate level of expertise to be determined by each industry or workplace);

- contextual understanding, including a broader understanding of society, macro-political and economic issues and industry or workplace contexts;
- education, training and development, including an understanding of broader ETD issues; an understanding of learning processes; communicative competence in both verbal and written form and interpersonal and analytical skills.

The **ETD roles** to be fulfilled by ETD facilitators entail various linked outcomes. Eleven roles were developed by the National Training Board (1994). These roles are loosely clustered around five key areas, namely: research; design and development; delivery; administration; and management. The assumption was also made that basic role descriptions are shared amongst ETD facilitators and that many facilitators perform all these roles to a greater or lesser extent as part of their overall jobs and at various responsibility levels. The roles should therefore be seen as integrated and interrelated. Few people, however, perform the full spectrum of ETD work and people are likely to be held responsible for clusters of skills.

ETD competencies are the skills, attitudes and knowledge that ETD facilitators need to enact a role and to be able to produce specified outcomes in accordance with the required quality standards. Competencies are not unique to a specific role, but cut across outcomes and roles. Mastering a competency or a cluster of competencies will thus support performance in a number of roles. A total of 53 generic competencies were identified within four main categories: general; training and development; distribution methods; and presentation methods. A further distinction was made between **core competencies** of the organisation in the context of strategy and organisational design, **occupational competencies** as entrenched in the National Qualifications Framework (NQF); and **individual generic competencies** for the assessment of potential and managerial development that are part of assessment and learning centre technology. It

is, however, foreseen that occupational competencies will play an important role in structuring development programmes for ETD facilitators.

From the literature, it was also established that **ETD outcomes** refer to those competencies (skills) that are performed in a context, to defined standards, and integrating knowledge and its application. Embedded in the standards are also those critical outcomes that include identifying and solving problems; working as a team; organising and managing oneself; collecting; analysing; organising and evaluating information; communicating effectively; using science and technology; and recognising problem-solving contexts. However, in achieving the end products and achievements, the capacity of the individual (personal commitment using personal attributes) and competence must result in successful performance in a managed work environment (Bellis, 1999).

The **conclusion** from the above is that the relationship between roles, competencies and outcomes needs to be internalised by ETD facilitators and used as a model to develop a range of new skills, knowledge and values for further ETD facilitator role specialisation in order to add value to learning. The ETD outcomes listed in Table 7 and Appendix A should serve as a framework for the development and career progression of ETD facilitators.

6.1.2 Conclusions regarding the specific empirical objectives

The following conclusions were made based on the results of the empirical study:

- **ETD roles:** All respondents indicated that the identified roles are performed to a greater or lesser extent as part of their overall job, whether that of instructor, training officer or training manager. At **instructor level**, the competency foundation appeared to be those skills directly related to the facilitation and coaching of learners in the workplace. Here the learning outcomes focus mainly on the technical acquisition of knowledge, skills and values in working with a range of machinery, equipment and processes. The results at **training officer level** indicate a broader

competency foundation, including the elements of the training and development cycle. Here the focus is mainly aimed towards technical training in the first place, followed by behavioural training, administration and adult basic education. At **training manager level**, the skills base is mainly those activities involving ETD management and administration. Direct contact with learners appear to be limited to behavioural training at supervisory and management levels.

The **conclusions** indicate that the ETD roles are loosely clustered around the following key areas and levels:

- Delivery of training at instructor level.
- Need analysis, design and development at training officer level.
- Administration and management at training manager level.
- **ETD competencies:** The results indicated that the current level of expertise is grouped mainly at the intermediate level (3 – 4). Here respondents assessed themselves to have a comprehensive understanding of key principles and are capable of making complex decisions regarding the application of the competencies to ETD practices. Very noticeable was the low scores obtained in the distribution methods competencies category. The low results is that ETD facilitators are not adequately equipped to deal with the learning technology revolution. Not only do ETD facilitators have to prepare managers and employees to become skilled in the use of technology in their day-to-day work, they also have to acquire skills themselves to effectively use technology when they facilitate effective learning in the workplace. This approach is clearly encouraged by the South African Qualifications Authority (SAQA) when it stated in the sixth critical outcomes that learning programmes should equip learners to use science and technology effectively and critically (Meyer, 1999).

Many special technological terms are used in the field of learning technologies. Appendix G gives a summary of learning technology terminology (Meyer, 1999), as well as a matrix to link electronic presentation methods with electronic

distribution methods (ASTD Models for Learning Technologies, 1998). The future importance of these learning technologies for future success clearly indicates the need for expanded roles, increased competencies and new outputs for ETD facilitators.

Furthermore, the results indicate that irrespective of the current level of expertise, the level of importance is between important and very important for future success.

- **ETD outcomes:** The results showed a high correlation between the individual outcomes for each ETD role. This confirms the notion that each outcome increases in complexity from basic, to intermediate, to advanced.

The **conclusion** is that the relationship between roles, competencies and outcomes describe the full range of ETD work in terms of outcomes (products and achievements), and focuses on outcomes rather than on behaviour and activities in order to respect the judgement component of ETD work. In the achievement of outcomes, the ETD facilitator must select the best behaviours and competencies needed to produce the final result.

6.2 LIMITATIONS OF THE RESEARCH

Two specific limitations were identified during the research:

- The range of competencies were not set at the three levels of complexity: basic, intermediate and advanced as was done for the outcomes section, which would have helped to identify the core ETD competencies for the instructor, training officer and training manager levels. Respectively one could only assume that the level of expertise between instructors and training managers varied between procedural, predictable and routine tasks and subject matter to non-routine and complex tasks and subject matter and uncertain situations; varied from short-term actions to decision-making at policy and strategic level with longer-term impact and wider influence; and proficiency in one role or subject matter and task area to being

versatile and able to perform a variety of roles and handle a wide range of subject and task areas.

- The competencies identified in the distribution method and presentation method categories were mainly those involved in the electronic delivery process. The low score results indicate that there could have been confusion between traditional instructional methods to deliver training and the new competencies required to deliver training in the new information age. A better explanation and description of these competencies could have assisted the respondents to make more informed self-assessment judgement decisions.

6.3 RECOMMENDATIONS

Recommendations to the CTFL SETA, as well as for further research, are hereby offered.

6.3.1 Recommendations to the CTFL SETA

The structure of the survey questionnaire provides a conceptual framework or model of roles, competencies and outcomes to assist individual companies to plan the development and career progression of ETD facilitators in the industry. The results of the empirical study provide a basis to identify those competencies that need to be developed immediately (2001), later (2002), and ultimately (2003 – 2004) as part of the companies' workplace skills plan and the sector skills plan.

More specifically, the following recommendations are offered:

- By using the point-scales utilised to determine current levels of expertise and future levels of importance for success as framework, a measurement tool was developed to assist in determining key development needs for ETD facilitators for the period 2001 to 2004. The mean (*M*) obtained in each current level of expertise per competency, and mean (*M*) obtained in each future importance level per competency

were plotted on the graph indicated below. For example, if adult learning had a current mean of “4,22” and a future mean of “3,45”, it would appear as shown below.

The competencies that fall within the shaded area are the areas that the average respondent thought to be very important for future success in the ETD field. There are also competencies that require the greatest amount of development. In particular, the closer the competency is to the lower, right-hand corner of the graph, the more immediate the development need.

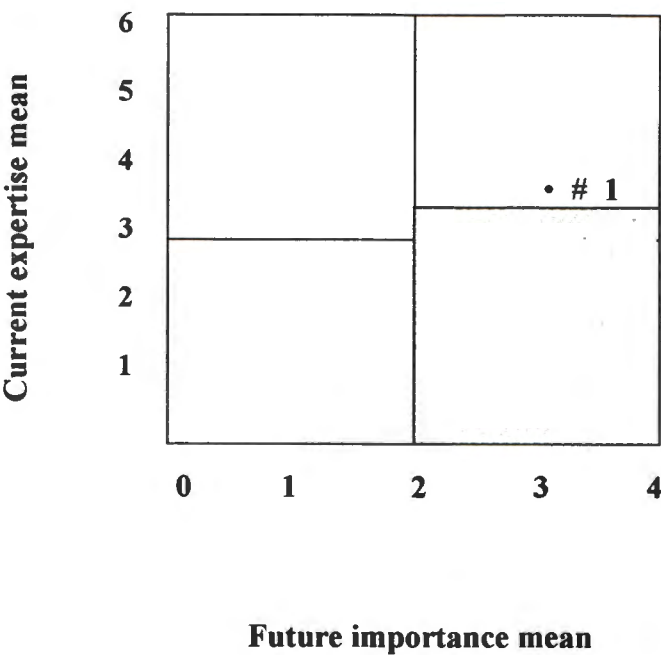


Figure 9: Development needs measurement model
(Source: ASTD Model for Learning Technologies, 1998)

Based on the above measurement tool, the following development needs for the year 2001 are listed in Table 16. All other development needs for the period 2002 – 2004 are enclosed in Appendix H.

Table 16

Development Needs for 2001

Current level of expertise		Future importance	
Competencies	M	Competencies	M
48. Remote-site co-ordination	2,08	48. Remote-site co-ordination	2,82
49. Technology evaluation	2,86	49. Technology evaluation	3,27
45. Limitations and benefits of distribution methods	2,98	45. Limitations and benefits of distribution methods	3,19
44. Cost analysis / ROI of the distribution methods	3,00	44. Cost analysis / ROI of the distribution methods	3,41
21. Cost benefit analysis skills	3,03	21. Cost benefit analysis skills	3,00
50. Cost analysis / ROI of the presentation methods	3,13	50. Cost Analysis / ROI of the presentation methods	3,25
27. Futuring skills	3,25	27. Futuring skills	3,34
46. Effect of distribution methods on learners	3,31	46. Effect of distribution methods on learners	3,19
23. Data reduction skills	3,33	23. Data reduction skills	3,02
12. Contracting	3,36	12. Contracting	2,98
13. Project management	3,43	13. Project management	3,38
51. Limitations and benefits of presentation methods	3,43	51. Limitations and benefits of –presentation methods	3,22
47. Integration of distribution methods	3,48	47. Integration of distribution methods	3,25
33. Organisation behaviour understanding	3,49	33. Organisation behaviour understanding	3,31

- An ETD facilitator development model for the industry needs to be developed. The model should provide scope for the ETD facilitator who wishes to develop or remain as a technical expert in a particular field, e.g. weaving, spinning or textile finishing technology, while facilitating the learning of others in that particular field; the facilitator who wishes to specialise in ETD, e.g. the development of other facilitators, or the development of the ETD field; and both part-time and full-time facilitators in the above two categories.

One main component of the model is the establishment of a broad foundation for facilitator development and a basis for progression. The foundation is to include three core areas: occupational and subject matter expertise; contextual understanding; and ETD itself. The latter involves the 11 ETD roles as the key building block in the model.

Each role is to be described in terms of required outcomes. (see Table 7 and Appendix A). The competencies identified in the questionnaire are the skills, attitudes and knowledge that ETD facilitators need in order to be able to produce the required outcomes. Progression is facilitated by the achievement of applied competence at different complexity levels, ranging from basic to advanced. In achieving the outcomes, progression is further facilitated by the acquisition of credits. The sum total of credits should relate to specific levels on the NQF. As could be seen from the draft Unit Standards for Occupationally-directed ETD practices, the qualification levels range from NQF 4 to NQF 6 (Appendix A).

The model is reflected in Figure 10 below.

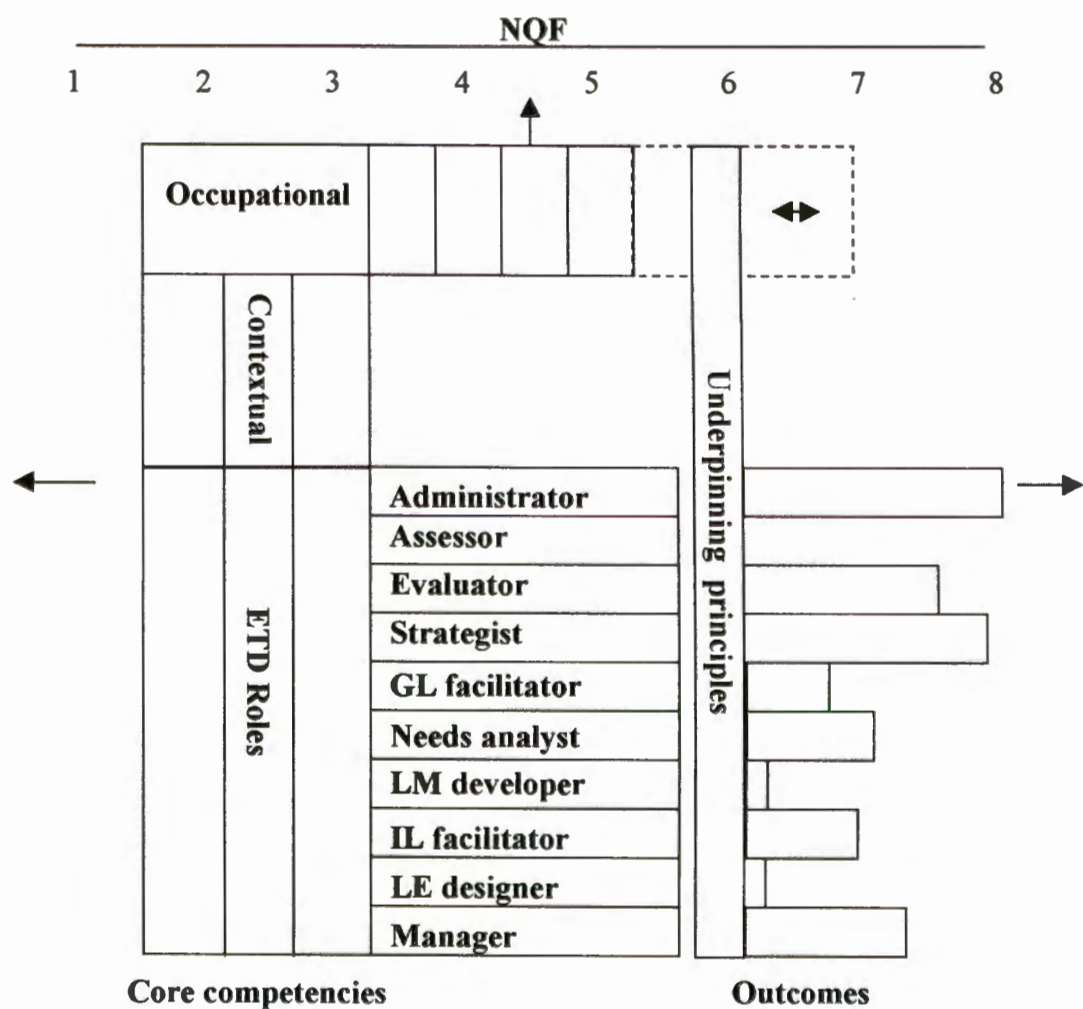


Figure 10: The practitioner development model
 Source: National Training Board (1994, p. 143)

6.3.2 Recommendations for future research

- ETD outputs tied to ETD roles have been identified in this mini-dissertation. It will be helpful if the quality requirements for each ETD output were researched.
- A generic list of competencies was identified and used in the questionnaire. Further research to couple these competencies to ETD roles or clusters of roles is recommended.
- The questionnaire should be used in a different industry to test its reliability and validity.
- ETD outputs and roles should also be researched in other industries.

REFERENCES

- Allie, N. (1997). Redressing inequality in ETD. *Salut*, 4(12), 30.
- Babb, S. (1998). Learning within the context of the NQF. *People Dynamics*, 16(4), 42 – 43.
- Bellis, I. (1999). Between a rock and a hard place. *People Dynamics*, 17(9), 14 – 19.
- Bloom, B.S. (1956). *Taxonomy of education objectives: Book 1-Cognitive domain*. New York: Longman.
- Boyatzis, R.E. (1982). *The competent manager: A model for effective performance*. New York: Wiley.
- Chetty, P. (1998). Technology in the new curriculum. *Spectrum*, 36(1), 2 – 3.
- Clark, L.A. & Watson, D. (1995). Construct validity: Basic issues in objective scale development. *Psychological Assessment*, 7, 309-319.
- Dubois, D.D. (1993). *Competency-based performance improvement*. Amherst, MA: HRD Press.
- Department of Education. (1997). *Curriculum 2005: Specific outcomes, assessment criteria, range statements. Grades 1 to 9*. Pretoria: Department of Education.
- Education, Training and Development (ETD) Practices Project. Phase 2 Report*. (1997). Government to Government Technical Co-operation Project: RSA and Federal Republic of Germany. Pretoria: National Training Board.
- Education, Training and Development (ETD) Practices Project. Draft Report. April* (1998). Government to Government Technical Co-operation Project: RSA and Federal Republic of Germany. Pretoria: National Training Board.
- Erasmus, B.J. & van Dyk, P.S. (1999). *Training management in South Africa* (2nd ed.). Halfway House: International Thomson Publishing.
- Franklin, J. (1995). Assessment and feedback. In W.J. Rothwell, R. Sullivan & G.N. Mclean (Eds.), *Practicing organisation development* (pp. 139 – 169). San Francisco, CA: Jossey-Bass.
- Hallendorff, E. (1999). *Overview of the National Qualifications Framework*. Paper presented at the National ABET Conference. Johannesburg: Technikon SA.
- HSRC. (1995). *Ways of seeing the NQF*. Pretoria: Human Science Research Council.

- Huysamen, G.K. (1993). *Metodologie vir die sosiale en gedragwetenskappe*. Johannesburg: International Thomson Publishing Company.
- IMD. *World Competitiveness Yearbook 1996*. Lausanne: IMD.
- Janse van Rensburg, J.J. (1998). Outcomes based teaching and learning: Concepts and essentials. In F. Pretorius (Ed.), *Outcomes-based education in South Africa* (pp 27 – 42). Johannesburg: Hodder & Stoughton.
- Jaques, E. (1995). *Executive leadership: A practical guide to management complexity*. Arlington, VA: Basil Blackwell.
- Jerling, K. (1996). *Education, training and development in organisations*. Pretoria: Kagiso.
- McLagan, P. (1983). *Models of excellence*. Alexandria, VA: American Society for Training and Development.
- McLagan, P.A. (1989). *Models for HRD practice*. Alexandria, VA: American Society for Training and Development.
- Meyer, M. (1999). *Managing human resources development: An outcome-based approach*. Durban: Butterworths.
- Meyer, T. (1995). Competency controversy: Which direction to follow? *People Dynamics*, 13(8), 23 – 26.
- Meyer, T. (1995). The case for a flexible approach to financing and governance of training in South Africa. *Industrial Democracy Review*, 4(5), 12 – 17.
- Meyer, T. (1996). *Creating competitiveness through competencies: Currency for the 21st century*. Randburg: Knowledge Resources.
- Meyer, T. (1997). Creating competitive advantage through competencies. *Management Today*, 13(5), 26.
- National Training Board. (1994). *A discussion document on a national training initiative*. Pretoria: National Training Board.
- Norms and Standards for Teacher, Education, Training and Development*. (1997). Pretoria: Technical Committee on the Revision of Norms and Standards for Teacher Education. Pretoria: Department of Education.
- Nunnally, J. & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Olivier, C. (1998). *How to educate and train outcome-based*. Pretoria: J.L. van Schaik.

- Phillips, B. (1997). *Getting to grips with the National Qualifications Framework (NQF). The NQF network*. Johannesburg: Sigma Press.
- Pickett, L. (1995). *Global competencies for workplace outcomes*. Unpublished paper. Sydney: Australian Human Resources Institute.
- Piskurich, G.M. (1998). Future forces. In G.M. Piskurich, & E.S. Sanders (Eds.), *ASTD Models for Learning Technologies* (pp. 5-6). Alexandria, VA: American Society for Training and Development.
- Piskurich, G.M. & Sanders, E.S. (1998). *ASTD models for learning technologies*. Alexandria, VA: American Society for Training and Development.
- Rieger, D.G. (1995). *Strategic HRD: A functional strategic approach*. Unpublished master's dissertation, Rand Afrikaans University. 39 – 58.
- Robinson, D.G. & Robinson, J.C. (1998). *Moving from training to performance: A practical guidebook*. Alexandria, VA: American Society for Training and Development.
- Rothwell, W.J. & Kazanas, H.C. (1994). *HRD – A strategy approach*. Amherst, MA: HRD Press.
- RSA. (1995). South African Qualifications Authority Act (Act No. 58 of 1995). Government Notice No. 1521. *Government Gazette 364 (16725) (4 October)* Pretoria: Government Printer.
- RSA. (1998c). Skills Development Act (Act no. 97 of 1998). *Government Gazette 401 (19420) (2 November)* Pretoria: Government Printer.
- RSA. (1999a). Skills Development Levies Act. (Act no. 9 of 1999). *Government Gazette 406 (19984) (30 April)* Pretoria: Government Printer.
- RSA. (2000). South African Qualifications Authority Act. (Act No. 58 of 1995). Government Notice No. 1214. *Government Gazette 419 (21142) (3 May)* Pretoria: Government Printer.
- SAS Institute. (1996). *SAS users guide: Basics Version* (6th ed.). Cary, NC: SAS Institute.
- SAQA. (1999). Criteria and guidelines: Education and training Quality Assurance Bodies (ETQAs). *SAQA Bulletin*, 2(3), 87 – 118.
- SAQA. (1999). Towards transforming the field of ETD: A methodology and model for qualifications and standards-setting from the Education, Training and Development (ETD) practices project. *SAQA Bulliten*, 2(2), 35 – 47.

- Shaughnesey, J.J. & Zechmeister, E.B. (1997). *Research methods in psychology* (4th ed.). London: McGraw-Hill.
- Spady, W.G. (1994). *Outcomes-based education. Critical issues and answers*. Arlington, VA: American Association of School Administrators.
- Spangenberg, H. (1990). *Assessing managerial competence*. Kenwyn: Juta.
- Steyn, A.G.W., Smit, C.F., Du Toit, S.H.C. & Stasheim, C. (1995). *Moderne statistiek vir die praktyk* (5th ed.). Pretoria: J.L. van Schaik.
- Tapscott, D. (1998). *Blueprint to the digital economy: Creating wealth in the era of e-business*. New York: McGraw-Hill.
- Textile Topics. (1997). *Textile Federation*, 10(1), 1.
- Tyers, J. (1995). National Qualifications Framework: Who are the beneficiaries? *Human Resource Management*, 11(9), 28 - 31.

National Certificate in Occupation-directed Education, training and development practice Field : Education, Training and Development Sub-Field : Adult Learning NQF Level : 4 Credits : 120 Overall Purpose A practitioner who has achieved this qualification will have achieved a basic competence in planning, delivering and evaluating occupation-directed education, training and development (ETD). They will be capable of making significant contributions to achieving targeted and structured skills development at course level. The qualification will allow practitioners to advance to a level 5 Certificate in occupation-direct ETD. It also provides them with credits, which they can carry across towards earning any other ETD qualification at the same level.	National Certificate in Occupation-directed Education, training and development practice Field : Education, Training and Development Sub-Field : Adult Learning NQF Level : 5 Credits : 120 Overall Purpose A practitioner who has earned this qualification will advance their competence in a range of ETD roles. (The qualification is thus a formative rather than a specialist qualification). They will be capable of making significant contributions to structured and targeted skills development at the level of learning programmes within enterprises or other learning environments. The qualification will allow practitioners to advance to a level 5 Diploma in Occupation-Directed ETD. It also provides them with credits which they can carry across towards earning any other ETD qualification at the same level.	National Certificate in Occupation-directed Education, training and development practice Field : Education, Training and Development Sub-Field : Adult Learning NQF Level : 6 Credits : 360 Overall Purpose A practitioner who has achieved this qualification will have achieved a deep disciplinary or occupational base in support of ETD practice. This will further advance their competence in selected ETD roles and build a basis for specialised learning. They will be capable of making significant contributions to structured and targeted skills development within or across organisations, and at sectoral or national level. The qualification will allow practitioners to advance to a level 7 qualification in occupation-directed ETD. It also provides them with credits which they can carry across towards earning any other ETD qualification at the same level.
--	--	--

NQF Level 4	NQF Level 5	NQF Level 6
1. Plan Learning Events	1. Plan a learning programme	1. Plan a curriculum
Specific Outcome 1.1: Decide on the content of the learning event, e.g., - Analysing the sector, enterprise or workplace skills plan; - Identifying learner needs; and - Identifying available resources. Specific Outcome 1.2 Formulate the outcomes to be achieved in the learning event, e.g. - In relation to the skills plan; - In relation to the national outcomes, and - In accordance with learner needs Specific Outcome 1.3 Develop a series of activities which, e.g.: - Enable learners to achieve the intended outcomes; and - Uses an appropriate methodology consistently Specific Outcome 1.4 Create, select and adapt learner support materials or equipment for each activity which, e.g.: - Are appropriate to the level of learners, the purpose of the activities and the learning environment	Specific Outcome 1.1 Identify the labour market needs by, e.g: - Analysing the sector, enterprise or workplace skills plan to identify areas of potential need; or (if no plan exists) - Analysing the labour market in the relevant occupation to identify what needs exist. Specific Outcome 1.2 Establish the partnerships needed to design and deliver the programme by, e.g.: - Identifying relevant roleplayers in the design and delivery of the programme - Establishing a forum or structure needed to involve all parties; and - Identifying the functions, roles and levels of involvement for each roleplayer Specific Outcome 1.3 Identify and analyse the employment contexts within which learners will apply their competence by, e.g.: - Checking where learners will be (or are likely to be) employed; and - Analysing the nature of work in the employment context to identify the kinds of competence which learners will need	Specific Outcome 1.1 Establish partnerships needed for the design of the curriculum by, e.g.: - Identifying roleplayers suggested by the Skills Development Act, Labour Relations Act and other relevant legislation - Establishing a forum or structure to involve the relevant roleplayers, and - Working out the functions, roles and levels of involvement of all roleplayers. Specific Outcome 1.2 Identify the factors to be addressed in the curriculum by, e.g.: - Analysing the sector, enterprise or workplace skills plan - Identifying learner needs, and - Identifying available resources Specific Outcome 1.3 Develop a curriculum framework by, e.g.: - Mapping the progression and portability between the qualifications which the curriculum will cover - Defining the education and training philosophy or approach on which the curriculum is based, and - Outlining the purpose, outcomes, materials, and mode of delivery for each programme

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 1.5 Revise the activities if necessary Specific Outcome 1.6 Develop or adapt assessment activities, e.g.: • To ensure that learners will be able to assess themselves, and / or each other, and • Which will enable the practitioner to assess learner's difficulties and progress Specific Outcome 1.7 Evaluate the learning event plan and materials by, e.g.: • Identifying strengths and weaknesses, and • Building the lessons learned into future plans. Specific Outcome 1.8 Record the learning event plan in ways which, e.g.: • Enable practitioners to use them in the future; and • Will be suitable for quality assurance purposes	Specific Outcome 1.4 Identify or develop the qualification (or part qualification) which the programme will lead to by, e.g.: • Identifying an existing NQF qualification which describes the outcomes which will meet the labour market needs, or • Liaising with a relevant National Standards Body about developing a qualification which describes the outcomes needed Specific Outcome 1.5 Map the possible progressions to related qualifications by, e.g.: • Analysing similarities and differences with qualifications in related occupations; and • Analysing how learners will be able to progress to completing the qualification or to a further qualification Specific Outcome 1.6 Develop a set of course outlines which will help learners to achieve the outcomes by, e.g.: • Detailing the purpose, outcomes, materials, assessment strategy and mode of delivery for each course Specific Outcome 1.7 Pilot the programme by, e.g.: • Listing the factors on which feedback will be needed • Developing plans and instruments for collating information • Collecting and analysing information, and • Making revisions as needed.	Specific Outcome 1.4 Develop an assessment framework of the curriculum which include, e.g.: • The roles of learners, practitioners and quality assurance agencies • The purpose of assessment, including admission; placement; formative and summative assessment; and recognition of prior learning • Principles and procedures for conducting assessment, and • Where assessment should take place and what will be assessed Specific Outcome 1.5 Pilot the curriculum and make adjustment as a result of feedback and evaluation by, e.g.: • Listing the factors on which feedback will be needed • Developing evaluation instruments and strategies • Collating and analysing information and feedback, and • Making revisions as needed Specific Outcome 1.6 Evaluate own performance by, e.g.: • Identifying strengths and weaknesses, and • Planning to integrate lessons learned into future practice Specific Outcome 1.7 Record the curriculum and evaluation in ways which will, e.g.: • Enable practitioners to use them in the future, and • Be suitable for national and organisational quality assurance purposes

NQF Level 4	NQF Level 5	NQF Level 6
2. Prepare learning aids Specific Outcome 2.1 Select a range of available training materials by, e.g.: - Ensuring the training materials are relevant to the learning area; and - Ensuring the training materials are suitable for the target group. Specific Outcome 2.2 Adapt training materials by, e.g.: - Varying the sequence of activities - Editing, adding and / or removing materials - Modifying language and content to meet needs of the learners; and - Ensuring the level of materials is suitable for the learners Specific Outcome 2.3 Prepare learning aids in which, e.g.: - Where writing or illustrations are used, these are clear and neat - Concepts and information are accurate and appropriately sequenced, and - Learner involvement is encouraged Specific Outcome 2.4 Evaluate own performance by, e.g.: - Identifying strengths and weaknesses - Make plans to integrate lessons learned into future practice	2. Develop training materials Specific Outcome 2.1 Identify the need for materials by, e.g.: - Reviewing courses or programmes which are / will be offered - Reviewing existing materials to identify gaps or weaknesses, and - Analysing the scale of need, priority of materials and cost implications Specific Outcome 2.2 Develop outcomes to be achieved through the materials by, e.g.: - Analysing the audience to identify typical styles and needs - Developing outcomes in relation to national standards, and - Consulting those involved in delivery of programmes and courses Specific Outcome 2.3 Design the framework for the materials by, e.g.: - Deciding on the mode of delivery and media to be used - Researching the content, and - Developing the structure and training methodology Specific Outcome 2.4 Select resources to be used by, e.g.: Acknowledging or negotiating copyright or patent rights	2. Co-ordinate the design of a variety of training materials Specific Outcome 2.1 Investigate the need for training materials in the learning programme Specific Outcome 2.2 Select the appropriate learning support media based on learner needs and learning context. Specific Outcome 2.3 Determine the requirements, purpose and parameters of the training materials Specific Outcome 2.4 Communicate requirements, purpose and parameters to the development team Specific Outcome 2.5 Co-ordinate the materials development process by, e.g.: - Taking into account in the allocation of work the abilities of each developer - Developing content of the training materials - Designing structure of the training materials, and - Creating a draft copy of the training materials Specific Outcome 2.6 Arrange a pilot programme for the evaluation of the newly designed training materials

NQF Level 4	NQF Level 5	NQF Level 6
	Specific Outcome 2.5 Develop draft of materials by, e.g.: • Adapting resources appropriately • Developing activities • Sequencing materials, and • Editing where necessary Specific Outcome 2.6 Pilot materials by, e.g.: • Using materials with a representative sample of learners and practitioners, and • Collating and analysing feedback Specific Outcome 2.7 Complete final production by, e.g.: • Revising the materials, based on feedback Specific Outcome 2.8 Evaluate own performance by, e.g.: • Identifying strengths and weaknesses, and • Making plans to integrate lessons learned into future practice	Specific Outcome 2.7 Ensure revisions are made. Specific Outcome 2.8 Evaluate own performance by, e.g.: • Identifying strengths and weaknesses, and • Planning to integrate lesson learned into future practice.

NQF Level 4	NQF Level 5	NQF Level 6
3. Facilitate targeted skills development	3. Facilitate learning using a variety of methodologies	3. Facilitate learning through selecting and integrating methodologies
Specific Outcome 3.1 Prepare a learning environment that is appropriate for effective learning, e.g.: • Which is structured to ensure individual or group learning Specific Outcome 3.2 Encourage dialogue between, e.g.: • Learners and learners, and • Learners and practitioner Specific Outcome 3.3 Recap knowledge to link to previous learning Specific Outcome 3.4 Clarify goals / outcomes of the learning activity by, e.g.: Stating the goals / outcomes clearly Specific Outcome 3.5 Implement the learning activities by, e.g.: • Setting tasks and activities for individual or / and group learning • Encouraging an open, interactive and participatory approach within the learning situation • Monitoring the learners' progress • Managing the learning activity, and • Creating opportunities to apply new knowledge	Specific Outcome 3.1 Prepare the learners and the learning environment for effective learning Specific Outcome 3.2 Create strategies to encourage dialogue between participants by, e.g.: • Sensitising learners to different viewpoints Specific Outcome 3.3 Recap knowledge to link to prior learning Specific Outcome 3.4 Clarify the goals / outcomes of the learning activity by, e.g.: • Stating the outcomes are clearly, and • Understanding the relationship between different activities Specific Outcome 3.5 Implement learning activities by, e.g.: • Applying learning strategies for both group and individual work to the learning context • Encourage open, interactive and participatory approaches within the learning situation • Monitoring learner progress and making necessary interventions • Managing the learning event productively, and • Creating the opportunities to apply new knowledge within the various contexts	Specific Outcome 3.1 Prepare the learners and learning environment. Specific Outcome 3.2 Create communication and support strategies within groups to encourage, e.g.: • Dialogue • Lasting networks, and • Integration of different viewpoint. Specific Outcome 3.3 Relate new knowledge to prior learning Specific Outcome 3.4 Scope the intended learning strategy by, e.g.: • Clarifying goals / outcomes • Establishing relationships between various activities, and • Incorporating learner needs and expectations Specific Outcome 3.5 Implement the learning strategy by, e.g.: • Adapting the learning strategies for individual and / or group learning to the learning context • Using open, interactive and participatory approaches to construct knowledge • Supporting learner progress, and • Effectively managing the learning process

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 3.6 Consolidate the learning activity by, e.g.: • Encouraging learners to provide feedback, and • Reinforcing learning through activities such as summarising and reaching consensus. Specific Outcome 3.7 Evaluate the learning activity by, e.g.: • Identifying the strengths and weaknesses of the following: • The learners' performance in achieving the intended outcomes • The effectiveness of the different phases of the learning activity • Providing necessary creative / remedial measures Specific Outcome 3.8 Maintain administrative system	Specific Outcome 3.6 Consolidate the learning activity by, e.g.: • Encourage learners to provide feedback, and • Constructing a synthesis report based on learner feedback Specific Outcome 3.7 Evaluate the learning progress by, e.g.: • Reflecting on the learning process to determine the extent to which it has achieved the outcomes, and • Taking remedial action when necessary Specific Outcome 3.8 Maintain an effective and efficient administrative system	Specific Outcome 3.6 Consolidate the learning by, e.g.: • Encouraging learners to construct a synthesis report. Specific Outcome 3.7 Evaluate the learning process • Critiquing the facilitation and learning process through reflection, and • Making modifications to inform the planning of the facilitation of the future learning interventions Specific Outcome 3.8 Maintain effective and efficient administrative system

NQF Level 4	NQF Level 5	NQF Level 6
4. Conduct and Assessment	4. (a) Design integrated assessment for a learning programme	4. Manage quality assurance system
Specific Outcome 4.1 Plan for the assessment by, e.g.: - Establish / identifying the purpose of assessment by holding consultations / discussions with the learner(s) and other relevant parties - Selecting appropriate methods of assessment taking into account the purpose, environment and evidence to be collected, and - Selecting appropriate assessment activities and instruments to ensure the evidence gathered is adequate to prove competence. Specific Outcome 4.2 Prepare the learner for the assessment by, e.g.: - Explaining assessment process, appeals procedure, purpose, methods and documents to the learner(s). - Discussing learner's learning requirements, prior knowledge and experience, and - Agreeing on logistical arrangements with the learner and relevant parties. Specific Outcome 4.3 Conduct assessment by, e.g.: - Putting the learner at ease, and - Conducting assessment according to established assessment principles.	Specific Outcome 4.1 Consider the different purposes of assessment by, e.g.: - Including recognition of prior learning and summative and formative assessment in the learning programme Specific Outcome 4.2 Access information and resources for development of assessment by: - Gathering information on learners, on content, and on different learning environments, and - Collating resources for the design of assessment instruments. Specific Outcome 4.3 Design assessment activities and instruments by, e.g.: - Ensuring assessment design is consistent with the established assessment principles - Ensuring assessment design is in line with the established assessment principles - Ensuring assessment design is in line with national and organisational requirements for assessment - Developing appropriate assessment activities and instruments for different phases of the learning programme, and - Basing assessment activities on the unit standards identified for a specific learning programme.	Specific Outcome 4.1 Monitor quality assurance system by, e.g.: - Regularly monitoring learning programmes, training materials, staff performance and availability or resources - Regularly monitoring moderation and assessment practices - Regularly monitoring on-going staff development, and - Monitoring documentation and data management relevant to training Specific Outcome 4.2 Evaluate quality assurance system by, e.g.: - Developing review mechanisms to assist with evaluation of quality assurance system, and - Holding consultations with relevant role people to assist with the evaluation of organisation's quality assurance systems. Specific Outcome 4.3 Report and make recommendations by, e.g.: - Submitting report (which include recommendations for future developments) on a regular basis to relevant SETA / ETQA bodies and to relevant people within the organisation on status of quality assurance system, and - Planning and implement approved changes to organisation's quality assurance system.

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 4.4 Make assessment decisions about learner's competence by, e.g.: - Evaluating evidence collected against assessment criteria. Specific Outcome 4.5 Record assessment results by, e.g.: - Recording outcomes of assessment in line with organisational and national requirements Specific Outcome 4.6 Give feedback to the learner by, e.g.: - Giving feedback timeously, in an appropriate environment, to the learner and other relevant parties, and - Giving feedback in an affirming, constructive and interactive way. Specific Outcome 4.7 Evaluate the way in which assessment was conducted by, e.g.: - Identifying strengths and weaknesses in the practitioner's own performance, and - Making plans to integrate lessons learned in future assessments.	Specific Outcome 4.4 Integrate assessment into learning programme by, e.g.: - Linking assessment activities meaningfully to learning activities Specific Outcome 4.5 Evaluate assessment design for future improvements by, e.g.: - Identifying strengths and weaknesses in the practitioner's own performance of the above outcomes, and - Making plans to integrate the lessons learned into future assessment design	

NQF Level 4	NQF Level 5	NQF Level 6
	4. (b) Moderate an assessment Specific Outcome 4.1 Gather appropriate assessment and moderation documents. Moderation documents should be able to, e.g.: • Reflect the outcomes assessed • Provide qualitative and quantitative information on performance assessed, and • Include appropriate feedback to the learners assessed. Specific Outcome 4.2 Select ways of conducting moderation. Moderation should, e.g.: • Comply with organisational and national requirements • Ensure that unit standards and related assessment documents are appropriately used by assessors, and • Be based on samples appropriate to the time available for moderation, but adequate for making inferences. Specific Outcome 4.3 Moderate assessment practices. Such practices should be consistent with established assessment principles. Specific Outcome 4.4 Retrieve and record assessment information on a database Specific Outcome 4.5 Draw conclusions about the competence of the assessor based on national assessor standards Specific Outcome 4.6 Recommend future improvements to assessment practices. Recommendations are based on analyses of problems which would impact on fair, valid and accurate assessment practices.	

NQF Level 4	NQF Level 5	NQF Level 6
	Specific Outcome 4.7 Provide assessors with accurate advice and support which meet their education and training needs. Specific Outcome 4.8 Give feedback on the assessor's methods, approach and use of different types of evidence in a constructive way.	

NQF Level 4	NQF Level 5	NQF Level 6
5. Advise and refer learner Specific Outcome 5.1 Identify the kinds of information or support which learners may need e.g.: • Learning programmes content, structure, admission requirements, exit level outcomes and learning contracts • Career progression options within the occupation, and • Typical learning or personal difficulties experienced by learners. Specific Outcome 5.2 Source and maintain information on the above issues. Specific Outcome 5.3 Provide information to learners through, e.g.: • Displays • Workshops • Interviews, and • Industrial theatre Specific Outcome 5.4 Refer learners to employment service agencies or counseling agencies as appropriate, e.g.: • Counselors, which include: ➢ Career counselors ➢ Occupational therapists, and ➢ Social workers • Learning support services, which include: ➢ Learning support centres ➢ Community centres ➢ CCMA, and ➢ Support services	5. Guide and support learning Specific Outcome 5.1 Identify learner's needs regarding, e.g.: • Learning anxiety • Assessment anxiety, and • Barriers to learning Specific Outcome 5.2 Analyse problem / need and decide on appropriate action. Specific Outcome 5.3 Provide advice to learners, e.g.: • How to access information needed that practitioner cannot provide • Resources, options, people • Study methods • Learning pathways • Learnerships and skills programmes, and • Organisational expectations Specific Outcome 5.4 Provide support to learners, e.g.: • Stress management • Crisis management • Conditions of service, and • Employee wellbeing issues (i.e. medical, occupational, health and safety). Specific Outcome 5.5 Refer learners to specialist guidance and counselling services.	5. Guide and counsel learners Specific Outcome 5.1 Identify learners needs and problems e.g.: • Through interviews • When approached, and • Through ongoing interaction with learners Specific Outcome 5.2 Establish a relationship between oneself and the learner e.g.: • Relationship of trust, and • Relationship should assist the learner in dealing with the need problem. Specific Outcome 5.3 Provide guidance and counselling to the learner on the areas that the practitioner can handle, e.g.: • Career planning Specific Outcome 5.4 Refer issues outside of own expertise to a relevant specialist, e.g. to: • Occupational therapists • Social welfare issues • Alcoholic anonymous • Drug rehabilitation centres • Retrenchment counselling, and • Marriage / family counselling Specific Outcome 5.5 Evaluate the relationship and progress on activities one has with the learner and identify ways of improving it.

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 5.5 Record advice and support provided to learners Specific Outcome 5.6 Evaluate own performance by, e.g.: - Identifying strengths and weaknesses, and - Making plans to integrate lessons learned into future guidance and support.	Specific Outcome 5.6 Keep records of interactions with the learner in keeping with, e.g.: - The requirements of their organisation, and - Established counselling and guidance principles Specific Outcome 5.7 Evaluate own performance by, e.g.: - Identifying strengths and weaknesses in the guidance and support provided to learners, and - Developing plans to integrate lessons learned into future practice.	Specific Outcome 5.6 Keep records of interactions with the learner which, e.g.: - Should be confidential - Are in keeping with the organisational and established guidance and counselling principles.

NQF Level 4	NQF Level 5	NQF Level 6
6. Manage a skills development course Specific Outcome 6.1 Provide management and logistical support to a training course by, e.g.: • Applying and maintaining relevant management and administrative procedures • Following externally directed procedures, and • Co-ordinating the activities of ETD practitioners and other staff within the course Specific Outcome 6.2 Manage and maintain learning records by, e.g.: • Creating a storage and retrieval system for records, and • Deciding on necessary records to be kept, taking account of prescribed procedures. Specific Outcome 6.3 Involve learners in the management of learning by, e.g.: • Explaining the objectives, intended outcomes, and nature of the course, and • Explaining what is expected and required of learners. Specific Outcome 6.4 Contribute to the budgetary process by, e.g.: • Providing appropriate information, and Reflecting on financing in order to contribute to future financial planning Specific Outcome 6.5 Evaluate management of the training course by, e.g.: Making recommendations for better future procedures or support	6. Manage a learnership / learning programme Specific Outcome 6.1 Design and develop a management system for a learnership / learning programme by, e.g.: • Ensuring that the management system provides the support required for the learning to occur, and • Understanding management system for the implementation of learnerships within an enterprise as well as across various contexts. Specific Outcome 6.2 Co-ordinate the management of a learnership / learning programme by, e.g.: • Ensuring alignment with the educational aims and supporting the needs of the learnership / learning programme, and • Taking resources and educational management trends into account, and • Keeping the management open to reflection and adaptation. Specific Outcome 6.3 Develop plans for the improvement of the management by, e.g.: • Taking feedback, reflection and developing trends into account.	6. Manage a learning system Specific Outcome 6.1 Design and develop learning systems by, e.g.: • Ensuring systems are aligned with national /sector or enterprise policies and skills development plans • Being aware that a learning system may span a number of learnerships / learning programmes within an enterprise, or alternatively, a single learnership / learning programme may span across many institutional contexts, and • Ensuring learnerships / learning programmes are meeting market needs Specific Outcome 6.2 Co-ordinate management of multiple learning programmes by, e.g.: • Ensuring alignment with organisational systems and procedures • Taking resources, needs and education and training trends into account. • Keeping the system open to reflection and adaptation, and • Assessing the impact of legislative changes – current and future – and adjusting the learning system accordingly Specific Outcome 6.3 Develop long term plans for the improvement of the learning system by, e.g.: • Taking current situations and national trends into account.

NQF Level 4	NQF Level 5	NQF Level 6
7. Evaluate a course Specific Outcome 7.1 Identify the most appropriate option for evaluating a course by, e.g.: • Selecting the options from a given set of methodologies / approaches, and • Linking the options to the nature of the course being evaluated Specific Outcome 7.2 Develop a viable action plan for the evaluation of a work-related course by, e.g.: • Basing the action plan on using selected methodologies, and • Matching the action taken to the nature of the work processes for which training is happening Specific Outcome 7.3 Conduct the evaluation of the work-related course according to the action plan, adapting the evaluation as necessary. Specific Outcome 7.4 Report on the strengths and shortcomings of the learning events by, e.g.: • Taking into account the intended outcomes / standards for the course, and the success rate of learners on the course • Taking into account the target audience of the report, and • Ensuring the report is in the format most acceptable to the context of the training	7. Evaluate learning programmes Specific Outcome 7.1 Design evaluation strategies for learnerships / learning programmes by, e.g.: • Devising evaluation components which include appropriate methodology(ies), plans for preparation and implementation, and review plans; and • Taking into account accepted evaluation principles which are appropriate to both the organisational and / or the occupational environment. Specific Outcome 7.2 Implement evaluation strategies, adapting them or having them adapted as necessary Specific Outcome 7.3 Compare / match / judge evaluation results by, e.g.: • Gathering the results from various learning programmes Specific Outcome 7.4 Generate findings in order to recommend future improvements by, e.g.: • Disseminating and consulting on the findings in order to increase their impact. Specific Outcome 7.5 Evaluate the feasibility of the evaluation-generated recommendations Specific Outcome 7.6 Reflect on the effectiveness of the evaluation strategies	7. Evaluate learning systems Specific Outcome 7.1 Develop stakeholder driven evaluation systems within an enterprise or economic sector by, e.g.: • Working with affected stakeholders in order to jointly develop systems Specific Outcome 7.2 Evaluate systems consistently across a range of learning situations. Specific Outcome 7.3 Analyse the results of evaluation by, e.g.: • Taking into account efficiency and effectiveness of various learning options Specific Outcome 7.4 Report and generally communicate the analysis of the evaluations to the involved stakeholders and the appropriate audiences. Specific Outcome 7.5 Evaluate the effectiveness of the evaluation systems by, e.g.: • Taking into account efficiency and effectiveness of various evaluation options

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 7.5 Propose possible improvements to the course by, e.g.: • Taking account of the learning outcomes / standards that the course was designed to achieve. Specific Outcome 7.6 Analyse the evaluation exercise Specific Outcome 7.7 Identify areas for improvement in applying the evaluation.		

NQF Level 4	NQF Level 5	NQF Level 6
8. Conduct elementary field research in ETD or occupation	8. Design and conduct research	8. Design, conduct and co-ordinate research
Specific Outcome 8.1 Select an area of ETD or occupational practice for investigation by, e.g.: - Formulating a research question, and stating why it is a worthwhile topic or investigation. Specific Outcome 8.2 Select a research technique or instrument by, e.g.: - Justifying the selection with reference to the area to be researched Specific Outcome 8.3 Develop a realistic action plan for conducting the research by, e.g.: - Considering the research objectives, the context, and resources available. Specific Outcome 8.4 Conduct and manage the research in accordance with the action plan by, e.g.: - Adapting both the plan and the implementation as necessary. Specific Outcome 8.5 Reflect on the appropriateness of the research instrument, including, e.g.: - The appropriateness of the research instrument - The success of the action plan, and - The outcomes of the research	Specific Outcome 8.1 Select an area and topic for research by, e.g.: - Considering the aims and objectives of the skills development strategy - Considering sector and workplace skills development plans, and - Selecting areas or topics that will transform an element of ETD or occupational practice Specific Outcome 8.2 Select and apply appropriate research methodologies by, e.g.: - Considering research aims and resources available Specific Outcome 8.3 Design a research action plan by, e.g.: - Considering research aims and selected methodologies as well as the resources available Specific Outcome 8.4 Conduct and manage the research process according to the research action plan by, e.g.: - Adapting both the plan and the implementation as necessary Specific Outcome 8.5 Interpret the data collected with regard to the research question and methodology, hypothesis and topic concepts	Specific Outcome 8.1 Select an area and topic for research by, e.g.: - Considering the aims and objectives of the skills development strategy - Considering sector and workplace skills development plans, and - Selecting areas or topics that will transform an element of ETD or occupational practice, or contribute to the development of a discipline Specific Outcome 8.2 Select and apply appropriate research methodologies by, e.g.: - Considering research aims and resources available, and - Considering disciplinary norms and bodies of knowledge Specific Outcome 8.3 Design a research plan by, e.g.: - Considering research aims and selected methodologies as well as resources available, and - Considering norms and ethics of the discipline or occupation concerned Specific Outcome 8.4 Conduct and manage the research process according to the research action plan by, e.g.: - Adapting both the plan and the implementation as necessary

NQF Level 4	NQF Level 5	NQF Level 6
Specific Outcome 8.6 Write and present a final report on the research e.g.: • In a format usefull and acceptable to relevant stakeholders	Specific Outcome 8.6 Evaluate the research process by, e.g.: • Considering the intended process and the extent to which the research question has been satisfactorily answered. Specific Outcome 8.7 Make recommendations regarding future improvements to research Specific Outcome 8.8 Produce and present a research report by, e.g.: • Considering a format appropriate to the target audience, and • Considering a format appropriate to the occupation or discipline	Specific Outcome 7.5 Interpret the data collected with regard to the research question and methodology, hypothesis and topic concepts Specific Outcome 7.6 Evaluate the research process by, e.g.: • Considering the intended process and the extent to which the research question has been satisfactorily answered. Specific Outcome 7.7 Make recommendations regarding future improvements to research.

NQF Level 4	NQF Level 5	NQF Level 6
9. Engage in occupational developments Specific Outcome 9.1 Identify recent changes in a chosen occupation by, e.g.: • Using more than one source to collect this information • Categorising various forces impacting on the profession, and • Identifying ways in which the occupation has adapted to forces impacting on it. Specific Outcome 9.2 Identifying possible implications of recent occupational changes on occupation education, training and development, by, e.g.: • Enquiring in what ways has training changes over the last few years • Identifying possible implications of recent government strategies and legislation on the occupation. • Identifying the major challenges currently facing ETD for this occupation • Identifying some of the strengths and weaknesses of current ETD for this occupation, and • Suggesting ways in which ETD for this occupation might meet some of the challenges facing it. Specific Outcome 9.3 Incorporate the issues identified above onto the practice of the ETD roles prescribed for NQF level 4 by, e.g.: • Identifying the ways in which the issues above impact on each role • Demonstrating the ways in which this has been incorporated into the practice of these roles.	9. Engage in occupational development Specific Outcome 9.1 Analyse recent changes in a chosen occupation, both in South Africa and in three other countries by, e.g.: • Using three or more sources to collect this information • Categorising various forces impacting on the profession, and • Identifying ways in which the occupation has adopted or failed to adapt to forces impacting on it Specific Outcome 9.2 Identify possible implications of recent occupational changes on occupational education, training and development in South Africa and in three other countries by, e.g.: • Comparing and contrast changes in occupational ETD in South Africa and three other countries over the last few years • Identifying possible implications of recent government strategies and legislation on the occupation in South Africa • What major challenges currently face ETD for this occupation in South Africa • Identify some of the strengths and weaknesses of current ETD for the occupation in South Africa, and • Suggest in which ETD for this occupation might meet some of the challenges facing it	9. Engage in occupational development Specific Outcome 9.1 Analyse recent changes in a chosen occupation in South Africa and international by, e.g.: • Using a range research techniques to collect this information • Categorising various forces impacting on the profession, and • Identifying ways in which the occupation has adapted or failed to adapt to forces impacting on it, and some of the underlying reasons Specific Outcome 9.2 Identifying possible implications of recent occupational changes on occupational education, training and development in South Africa and internationally by, e.g.: • Comparing and contrasting changes in ETD for the occupation in South Africa and internationally over the last few years • Identifying possible implications of recent government strategies and legislation on the occupation in South Africa • Identifying major challenges currently faced by ETD for this occupation in South Africa • Identifying some of the strengths and weaknesses of current ETD for the occupation in South African, and • Suggesting ways in which ETD for this occupation might meet some of the challenges.

NQF Level 4	NQF Level 5	NQF Level 6
	Specific Outcome 9.3 Incorporate the issues identified above into ETD practice via the integrated practice of various ETD roles prescribed for NQF level 5 by, e.g.: • Identify the ways in which the issues above impact on each role and in the integrated performance of roles, and • Demonstrate the ways in which this has been incorporated into practice	Specific Outcome 9.3 Incorporate the issues identified above into ETD practice via the integrated practice of various ETD roles by, e.g.: • Identifying the ways in which the issues above impact on each role and on the integrated performance of roles, and • Demonstrating the ways in which this has been incorporated into practice.

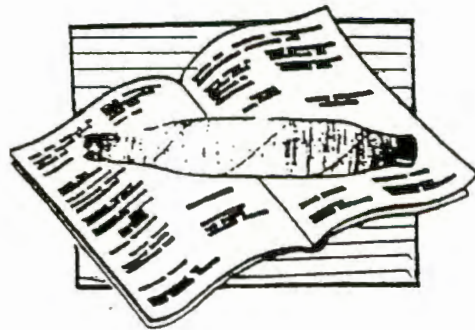
Textile Industry Training Board

3rd Floor, Umdoni Centre
28 Crompton Street
PINETOWN 3610

PO Box 935
PINETOWN
3600

Tel: (031) 702 4482/83/84
Fax: (031) 702 4113

E-mail: titb@dbn.lia.net



11 February 2000

Professor S Rothman
Department of Human Resource Development
University of Potchefstroom
Hofman Street
Private Bag X 6001
POTCHEFSTROOM
2520

Dear Professor Rothman

RESEARCH NEED IN OUTCOMES BASED EDUCATION FOR FACILITATORS

I understand that Ms Izel Barnard (10932380) is studying towards an M Com degree through your department. I also understand that she is required to select a topic for a research project and I wonder if you would allow her to conduct her project in the area of Outcomes Based Education (OBE) for facilitators in a textile environment. What would be required would be the compilation of a framework for a development programme for facilitators covering the principles of OBE and identifying the applied competencies required to deliver OBE towards the achievement of textile industry qualifications and performance standards.

The reasons are as follows:

- ◆ the textile industry has developed a qualifications framework and associated standards
- ◆ the industry is now in the process of implementation of OBE linked to the framework
- ◆ the industry has an enormous need to research the requirements of OBE and then to compile the framework for a development programme for facilitators. Textile companies would then be able to utilise the

SKILLS AUDIT *for the* **TEXTILE INDUSTRY**

conducted: **August/September 1997**



SUMMARY OF RESULTS

INITIATED by the TEXTILE INDUSTRY TRAINING BOARD
SPONSORED by: THE DEPARTMENT of LABOUR & TRADE and INDUSTRY

SKILLS AUDIT *for the* TEXTILE INDUSTRY - October 1997

INTRODUCTION:

In recent years, significant changes have taken place in the industry in the areas of Technology, Rationalisation, Markets, Global Competition and Work Organisation. These changes clearly necessitated a critical examination of current skill levels to meet these new challenges.

In order for the Textile Industry Training Board [TITB] to provide a comprehensive Training & Education service to the industry as a whole, it was identified through training workshops and agreed by all stakeholders that this survey should be conducted.

The purpose of the survey was to identify where skills exist in key functional areas and where there are major skills gaps in our industry, so that resources can be focussed on those areas which will result in the greatest return on investment. In addition, this audit would assist the Industry to align with the proposed Skills Development Bill. This project was accordingly seen as a critical priority for the TITB from which future developmental and training initiatives will flow.

When the survey forms were originally sent to companies for completion it was intended that both management and shop stewards would jointly undertake the exercise. However, it appears that in many cases the shop stewards were not included in the process until the final signing off stage. This is the only disappointing aspect of the whole exercise because it is felt that an opportunity to co-operate in such a critical area of human resource development was missed.

TERMS of REFERENCE:

The terms of reference agreed by the TITB executive, the Training & Development Management Committee [TDMC] and the Department of Labour [DOL] were as follows:

- To ascertain approximate numbers of employees in key functional areas . Where possible, a racial and gender classification was also to be identified.
- To identify academic qualifications and key skills currently existing within the Industry.
- To identify skill shortages, especially with reference to skills proposed in the Learnership Model.
- To evaluate different options available to satisfy the demand for appropriate personnel.
- To develop an acceptable strategic training plan to satisfy the needs of the Textile Industry.

METHODOLOGY:

The following process, timescale and methodology resulted in the production of this report:

- Agreement for Skills Audit reached at Training Summit and Training Workshops - 1995 / 96
- Co-ordinator appointed to oversee the project - 1996
- Survey document developed and approved by Employer and Labour representatives via the TDMC - April 1997
- Survey document launched at presentations in five main textile regions - July 1997
- Survey documents returned to TITB - September 1997
- Analysis and preparation of report for TITB Board meeting - November 1997
- Results circulated to Industry - December 1997.

ACKNOWLEDGEMENTS:

Appreciation and gratitude is expressed to all those who assisted with the Skills Audit process, including the:

- Department of Labour and Department of Trade & Industry for their valuable advice and generous sponsorship of this project
- Peniel Mashele - Department of Labour, Miriam Altman - DTI representative
- TITB Executive, TDMC members, TITB Technical Training Advisors
- 111 companies, who provided the detailed information required to make this the most comprehensive survey ever undertaken

EXPLANATORY NOTES:

1. Some comparisons with the 1990 NPI and the 1991 TITB reports have been drawn in the present document. Where information in these reports was parallel to current information, comparisons have been included. However, it is important to note that the sample in these reports was not as inclusive as the one in this report and therefore trends identified may not be representative [see the summary on page 4]. The NPI acknowledged on page 1 of their report, that their report "*..... lacks the quantitative and logical precision with which the NPI is associated.*"
2. Definitions used in the audit:
Management includes Managers & Directors
Supervisory includes Foremen, Overseers, Supervisors, Superintendents, Charge Hands.
Artisans / Technicians includes Engineering and Textile artisans and Technicians.

INDEX of RESULTS

	TOPIC	PAGE
SUMMARY OF PARTICIPATING COMPANIES		4
MANPOWER DEVELOPMENT PROGRAMMES		5 - 6
ABE ANALYSIS & COMMENTS		7
TRAINING ACTIVITIES OF ALL EMPLOYEES UP TO, AND INCLUDING OPERATORS		8 - 11
TRAINING OF ALL EMPLOYEES EXCLUDING MANAGEMENT		12
RACIAL & GENDER CLASSIFICATION	MANAGERS	13
	SUPERVISORS	14
ALL EMPLOYEES (excluding directors / managers, supervisors, and artisans / technicians)		15
	ALL EMPLOYEES	16
GENDER CLASSIFICATION	ALL EMPLOYEES	17
RACIAL CLASSIFICATION	ARTISANS / TECHNICIANS	18
ACADEMIC QUALIFICATIONS	ARTISANS / TECHNICIANS	19
	MANAGERS / SUPERVISORS	20
PERSONNEL ACTIVITIES		21
TRAINER PROFILES		22 - 23
	SPECIALIST TRAINING	24
TEXTILE TECHNOLOGISTS (TECHNIKON), TECHNISA & CSIR		25 - 27
APPRENTICES / TRAINEES		28
RATIO OF EMPLOYEES per QUALIFIED PERSON		29
COMMENTS ON THE SKILLS AUDIT & APPENDIX		30 -

SUMMARY of PARTICIPATING COMPANIES

REGION	LABOUR COMPLIMENT of PARTICIPATING COMPANIES						TOTAL EMPLOYEES
	1 - 99	100 - 299	300 - 699	700 - 1299	1300 - 2499	+ 2500	
KWAZULU NATAL [41]	13	10	15	2	0	1	16203
EASTERN CAPE [8]	1	1	2	1	3	0	7078
WESTERN CAPE [40]	17	8	9	5	1	0	12469
GAUTENG & OTHER [22]	12	7	2	1	0	0	3559
SOUTH AFRICA [111]	43	26	28	9	4	1	39309
% of PARTICIPATING COMPANIES	38.8	23.4	25.2	8.1	3.6	0.9	
1991 TITB REPORT for SA [31]	0	2	12	7	9	1	31923
% of PARTICIPATING COMPANIES	0	6.5	38.7	22.6	29.0	3.2	

COMMENTS:

The average size company in this survey is 354, compared to 1030 in the 1991 report. [see comment on page 2] ' 48,6% of the sample employed between 100 to 699, with 38,8 % below 100 and 12,6% above 700. This sample accurately represents the Industry at present and is considered to be statistically representative.

NOTE: The reference number [ref...] on the top left of some charts refers to the specific page number on the Skills Audit Document completed by the individual companies, for easy cross reference.

MANPOWER DEVELOPMENT PROGRAMMES

ref 9, 10, 11

PERCENTAGE having ATTENDED One or more of the following :-  Surveys 	MANAGEMENT		SUPERVISORY		ARTISAN / TECHNICIAN	
	NPI - 1990	TITB-1997	NPI - 1990	TITB-1997	NPI - 1990	TITB-1997
MACHINE SUPPLIER COURSES	14	not asked	6	not asked	26	27
MANAGEMENT /SUPERVISORY SKILLS COURSE [Conducted externally]	not asked	39	not asked	21	not asked	not asked
IN-HOUSE CERTIFIED COURSES	21	31	36	42	34	22
CONSULTANT COURSES	15	18	1	18	0	15
NOSA	30	20	27	25	17	19
CSIR	1	5	1	7	4	5
NPI	6	6	0	3	0	2
PMI	7	4	1	2	0	1
IPM	not asked	2	not asked	0.5	not asked	0
SABS	7	11	2	4	0	3
TQM, ISO, FIRST AID, COMPRESSOR, OTHER	19	5	13	9	15	5

MANPOWER DEVELOPMENT PROGRAMMES

ref 9,10,11

TRAINING NEEDS as IDENTIFIED in the 3 CATEGORIES

[These received the most requests from all the regions- listed in order of priority]

<u>MANAGEMENT SKILLS</u>	1	TECHNIKON Diploma / Degree
	2	Management Skills [as obtained through a typical MDP]
	3	N4 - N6 Technisa studies
	4	Industrial Relations Skills

This survey indicated a general increase in the number of Managers attending developmental programmes.

<u>SUPERVISORY SKILLS</u>	1	Management / Supervisory
	2	Theoretical / Technical studies [as obtained through Technisa]
	3	Quality Assurance and Productivity Improvement Skills
	4	Industrial Relations

Survey results showed very good increases in Consultant type courses, CSIR and NPI.

<u>TECHNICAL SKILLS</u>	1	Apprentice Training - Weaving, Spinning Wet process & Knitting
	2	Machine Supplier - Specialist Courses
	3	Quality Assurance & Productivity Improvement skills
	4	Safety

Results show a slight improvement in Safety training, a greater emphasis on Consultant type courses. In addition, CSIR, NPI and PMI all showed increases.

ADULT BASIC EDUCATION & TRAINING (ABE)

ref 6

SURVEY QUESTIONS ▼ Number of companies per region 		KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]
Does the company PROVIDE ABE	YES	8 *	4	5	4	21
	* TOTAL LABOUR COMPLIMENT	7397	4234	2765	1432	15828 [40% of all employees]
	NO	33	4	35	18	90
If YES,	INTERNAL	6	3	4	3	17
	EXTERNAL	2	1	1	1	5
Does the company require TITB ASSISTANCE with ABE	YES	12	3	8	7	30
	*TOTAL LABOUR COMPLIMENT	7532	2727	1281	2247	13787 [35% of all Employees]
	NO	10	3	7	5	25
	NO COMMENT	19	2	25	10	56

TRAINING ACTIVITIES of ALL EMPLOYEES UP TO, & INCLUDING OPERATORS

ref 7a

OPERATIONAL AREA [OA]	NUMBER of Companies with OA [in survey]	Employees in each OA	WAS TRAINING CARRIED OUT IN THE FOLLOWING AREAS ?													IF YES			
			Induction	Company Benefits	General Safety	Company Rules & regulations	Inter-Personal Skills	Productivity	Decision Making	Quality Systems	Job Specific Safety	Process Knowledge	Operator Skills & Duties	m/c & Equipment knowledge	Fault identification & correction	Own Language ?	Handout Provided ?	Practical assessment ?	Certificate of Comp ?
FIBRE MANUFACTURE	6	495	50 *	50	50	50	33	33	33	50	50	50	50	50	50	50	50	50	17
TEXTURIZING	3	155	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
DRAWING / FILAMENTS	1	130	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0
RAW MATERIALS	65	765	60	54	65	63	6	20	12	43	52	38	48	35	34	46	23	40	14
BLOW ROOM / BLENDING	39	535	59	46	62	62	0	15	10	44	54	46	49	36	44	41	31	46	15
CARDING	38	655	76	63	79	79	0	21	16	55	76	63	68	55	58	58	32	63	16
COMBING	19	470	74	53	79	74	0	16	16	58	68	58	68	42	53	47	21	63	32
DRAWING	29	545	79	62	76	76	7	24	14	52	69	55	69	55	52	52	31	57	24
ROVING / TOP MAKING	18	585	67	50	67	67	6	17	6	56	67	61	61	56	56	50	33	67	22

* Each number indicates the percentage of employers who responded positively to the survey questions per Operational Area [OA]

Example : 68 % of CARDING personnel received formal training in OPERATOR SKILLS / DUTIES

Therefore, 32 % of 655 still require formal training ie. 210 employees [see shaded areas]

NOTE: Similar deductions can be made in any area of interest or concern.

CONTINUED ON NEXT THREE PAGES

TRAINING ACTIVITIES of ALL EMPLOYEES UP TO, & INCLUDING OPERATORS

ref 7a

OPERATIONAL AREA [OA]	NUMBER of Companies with OA [in survey]	Employees in each OA	WAS TRAINING CARRIED OUT IN THE FOLLOWING AREAS ?													IF YES			
			Induction	Company Benefits	General Safety	Company Rules & regulations	Inter- Personal Skills	Product- ivity	Decision Making	Quality Systems	Job Specific Safety	Process Know- ledge	Operator Skills & Duties	m/c & Equipment knowledge	Fault identifi- cation & correction	Own Language ?	Handout Provided ?	Practical assess- ment ?	Certificate of Comp ?
SPINNING	34	2595	76*	62	76	74	3	26	15	59	68	59	71	53	62	59	35	65	21
ROTOR / OE SPINNING	19	570	63	47	68	63	0	11	16	58	63	53	58	47	53	53	42	58	26
WINDING	53	2025	66	55	66	57	6	28	13	53	62	58	68	53	57	57	28	57	17
DOUBLING / UPTWISTING	36	1205	75	61	78	75	6	33	17	67	81	61	78	58	58	53	31	61	19
KNITTING	41	1640	68	54	76	78	17	39	15	49	59	51	71	61	61	59	22	41	12
WARPING / SIZING	52	1045	69	71	77	83	10	27	13	56	73	63	75	62	67	54	29	48	13
DRAWING - IN / KNOTTING	38	500	71	74	79	89	8	34	16	61	71	61	79	63	68	53	39	55	16
WEAVING	46	2960	72	72	78	89	9	30	15	65	74	61	78	72	78	61	39	59	20
NON - WOVEN	12	330	50	67	67	75	8	17	25	58	67	58	50	25	50	42	25	42	17

* Each number indicates the percentage of employers who responded positively to the survey questions per Operational Area [OA]

TRAINING ACTIVITIES OF ALL EMPLOYEES UP TO, & INCLUDING OPERATORS

ref - 7b

OPERATIONAL AREA [OA]	NUMBER of Companies with OA [in survey]	Employees in each OA	WAS TRAINING CARRIED OUT IN THE FOLLOWING AREAS ?													IF YES			
			Induction	Company Benefits	General Safety	Company Rules & regulations	Inter Personal Skills	Product- ivity	Decision Making	Quality Systems	Job Specific Safety	Process Know- ledge	Operator Skills & Duties	m/c & Equipment knowledge	Fault identifi- cation & correction	Own Language ?	Handout Provided ?	Practical assess- ment ?	Certificate of Comp ?
WOVEN CARPETS	4	245	100*	100	100	100	0	75	0	75	75	75	100	100	100	100	50	75	25
TUFTED CARPETS	6	280	50	50	67	83	17	17	17	33	83	67	67	33	50	50	17	50	0
NEEDLE PUNCH CARPETS	4	495	75	50	75	100	50	25	25	50	100	100	50	50	100	75	25	25	0
DYEING PREPARATION	47	875	70	60	72	74	9	40	26	53	68	66	74	66	64	51	40	60	28
DYEING / BLEACHING	60	1515	75	73	82	87	10	43	27	63	78	70	80	73	73	62	40	67	23
PRINTING	18	500	89	83	94	89	22	50	39	78	94	83	89	89	83	72	39	72	33
FINISHING	61	2455	74	69	77	80	8	33	21	56	69	59	74	57	62	54	36	51	16
INSPECTION	69	2025	75	71	77	83	10	38	32	62	71	64	71	57	74	51	38	51	16
LABORATORY	68	835	63	60	66	65	15	28	32	51	59	60	57	57	63	44	37	47	19

* Each number indicates the percentage of employers who responded positively to the survey questions per Operational Area [OA]

TRAINING ACTIVITIES of ALL EMPLOYEES UP TO, & INCLUDING OPERATORS

ref - 7b

OPERATIONAL AREA [OA]	NUMBER of Companies with OA [in survey]	Employees in each OA	WAS TRAINING CARRIED OUT IN THE FOLLOWING AREAS ?													IF YES			
			Induction	Company Benefits	General Safety	Company Rules & regulations	Inter-Personal Skills	Productivity	Decision Making	Quality Systems	Job Specific Safety	Process Knowledge	Operator Skills & Duties	m/c & Equipment knowledge	Fault identification & correction	Own Language ?	Handout Provided ?	Practical assessment ?	Certificate of Comp. ?
DESPATCH / STORES	89	1545	69*	65	70	71	10	25	17	44	62	44	47	47	45	54	27	57	9
SALES	71	925	56	54	55	52	24	10	27	38	35	45	34	28	34	44	27	34	11
PERSONNEL / TRAINING	64	530	63	63	64	64	34	28	34	48	56	48	50	39	45	50	38	41	22
ADMINISTRATION	90	1455	54	53	56	51	23	20	30	32	36	33	37	29	32	42	26	30	12
GENERAL ENGINEERING	70	1345	67	63	70	71	17	29	24	46	64	49	50	56	59	49	27	44	20
BOILER HOUSE	58	500	66	59	67	72	9	21	20	43	69	45	60	62	62	50	34	48	17
DRIVERS	81	600	63	62	70	69	19	21	19	35	60		51	48	47	49	31	41	21

AUDOPS3

* Each number indicates the percentage of employers who responded positively to the survey questions per Operational Area [OA]

NOTES :

OPERATIONAL AREAS most often highlighted as a TRAINING NEED (in the survey) , in order of PRIORITY :
 OPERATOR SKILLS / DUTIES
 PRODUCTIVITY
 QUALITY SYSTEMS
 PROCESS KNOWLEDGE
 INTER-PERSONAL SKILLS

Statistics indicated on the last four pages highlight additional areas of concern :
 SAFETY [in certain operational areas]
 DECISION MAKING
 MACHINE & EQUIPMENT KNOWLEDGE
 FAULT IDENTIFICATION & CORRECTION
 In addition, the low percentage of Handouts that are provided and Certificates of Competence issued.

ADDITIONAL ANALYSIS OF THE LAST FOUR PAGES IS CONTAINED IN ANNEXURE A

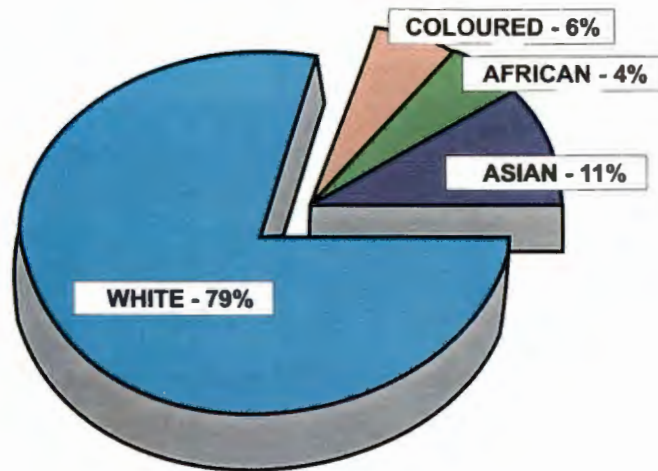
TRAINING of EMPLOYEES - EXCLUDING MANAGEMENT

ref. 8

IS TRAINING PROVIDED IN THE FOLLOWING AREAS (Answers are a percentage of the total response.)		YES	NO	OWN LANGUAGE	CERTIFICATE OF COMPETENCY	HANDOUT PROVIDED
FOR ALL EMPLOYEES	Induction	63	37	41	1	29
	Company Benefits	63	37	41	1	30
	Company Rules & Regulations	68	32	42	1	39
	General Housekeeping & Safety	72	28	46	7	28
	Interpersonal Skills	15	85	8	4	9
	Productivity	27	73	14	3	7
	Decision Making	15	85	7	2	7
	Quality Systems	50	50	24	5	14
TECHNICAL STAFF	Process/ Machine/ Equipment Safety	71	29	47	8	22
	Process Knowledge	59	41	36	8	18
	Machine & Equipment Knowledge	69	31	43	10	22
	Fault Identification & Correction	68	32	45	8	21
	Apprentice CBMT modules	21	79	17	11	14
SUPERVISORY STAFF	Process/ Machine/ Equipment Safety	64	36	41	76	23
	Process knowledge	65	35	39	7	19
	Machine & Equipment knowledge	65	35	39	5	18
	Fault Identification & Correction	67	33	39	5	17
	Supervisory Skills	65	35	39	23	40
	Industrial Relations	55	45	32	20	32

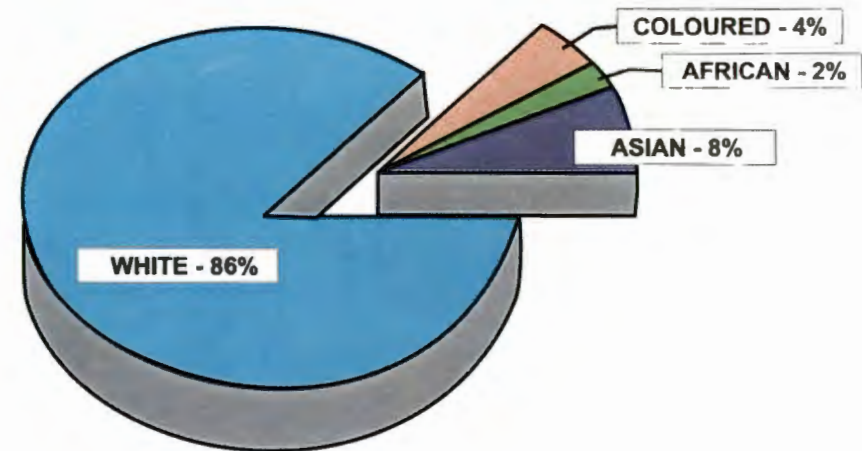
SOUTH AFRICA - 1997

[TITB report]



SOUTH AFRICA - 1990

[NPI report]



MANAGEMENT

RACIAL AND GENDER CLASSIFICATION

1997 REPORT : 94 COMPANIES [REPRESENTING 86% OF EMPLOYEES]

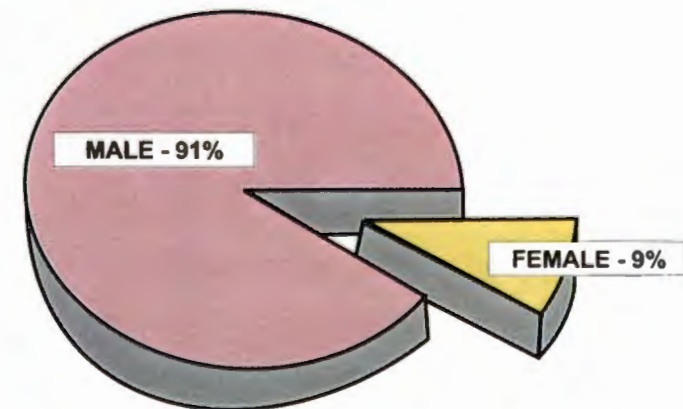
1990 NPI REPORT : 17 COMPANIES

	MALE	FEMALE
ASIAN	132	5
AFRICAN	43	2
COLOURED	61	17
WHITE	908	86

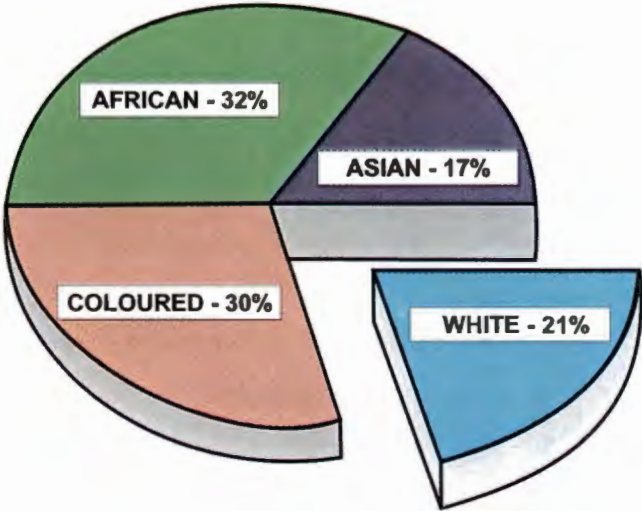
NOT CLASSIFIED : 194

SOUTH AFRICA - 1997

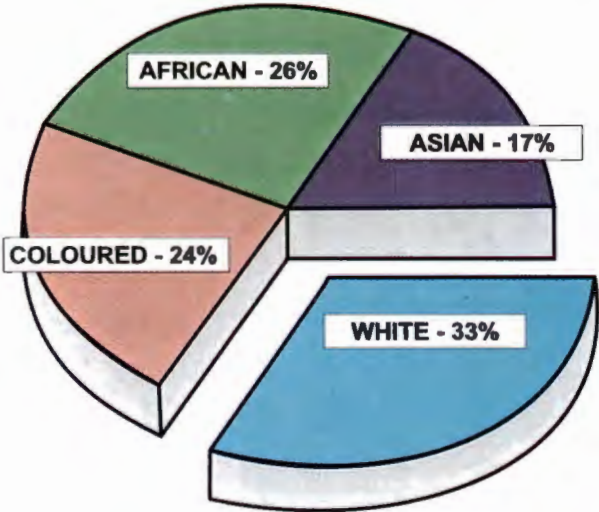
[TITB report]



SOUTH AFRICA - 1997
[TITB report]



SOUTH AFRICA - 1990
[NPI report]



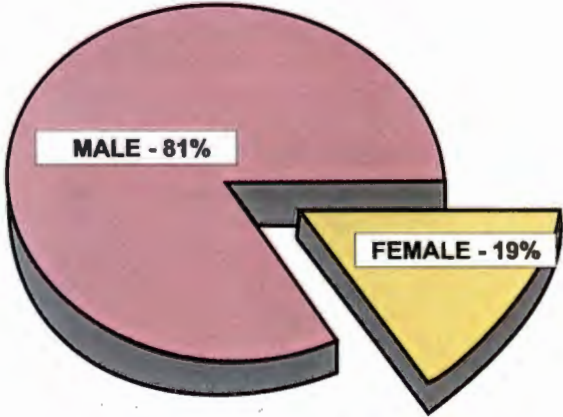
SUPERVISORY
RACIAL AND GENDER CLASSIFICATION

1997 REPORT : 94 COMPANIES [representing 86% of the employees]
1990 NPI REPORT : 17 COMPANIES

	MALE	FEMALE
ASIAN	362	29
AFRICAN	626	81
COLOURED	432	252
WHITE	415	57

NOT CLASSIFIED : 417

SOUTH AFRICA - 1997
[TITB report]

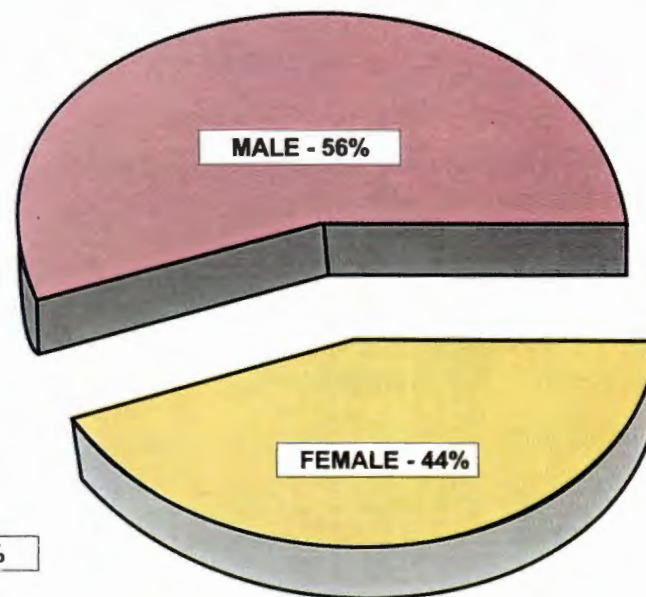
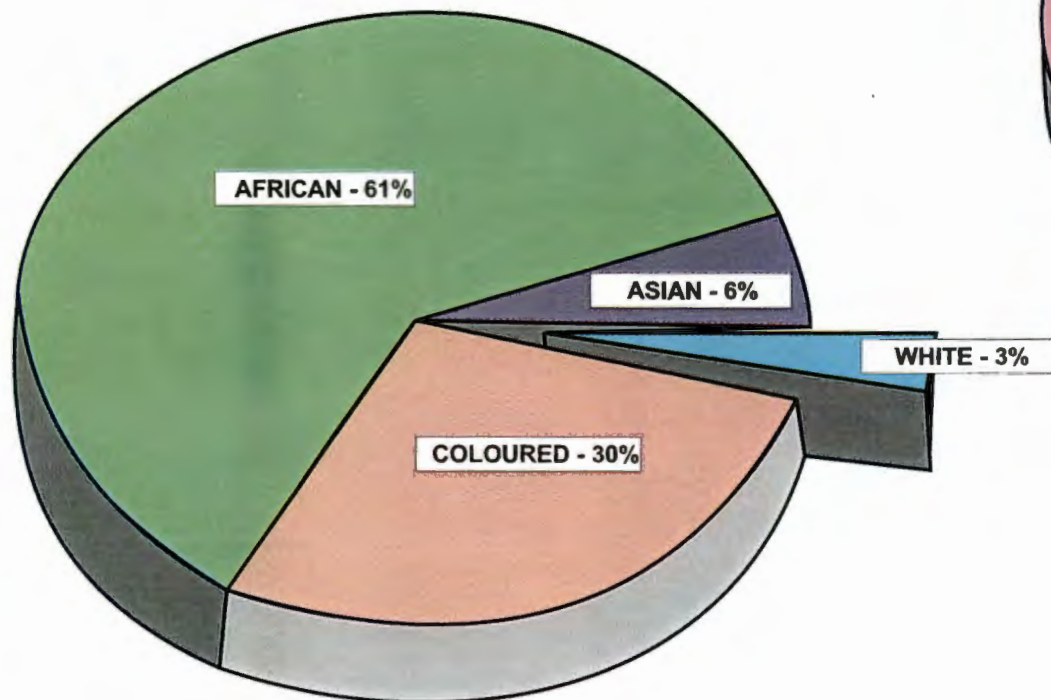


SOUTH AFRICA - 1997

SOUTH AFRICA - 1990

SOUTH AFRICA - 1997

[TITB report]



ALL EMPLOYEES

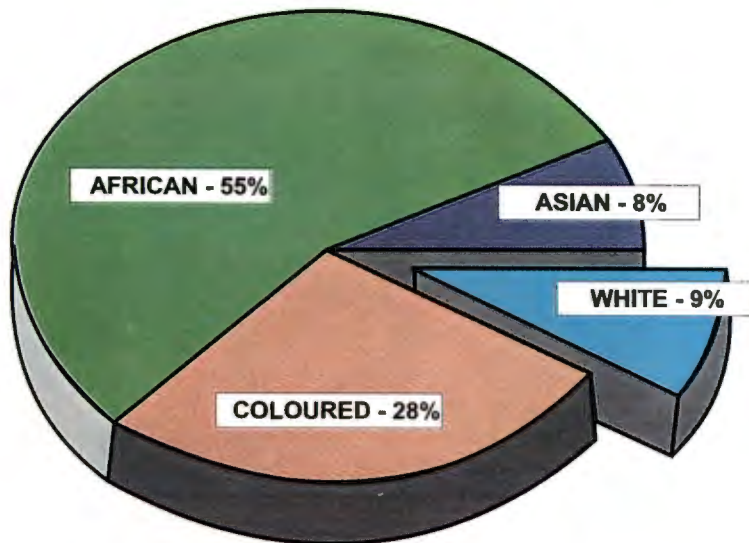
EXCLUDING MANAGEMENT, SUPERVISORY AND TECHNICAL
RACIAL AND GENDER CLASSIFICATION

1997 TITB REPORT : 94 COMPANIES [representing 86% of employees]

1990 NPI REPORT : NO FIGURES AVAILABLE IN THIS CATEGORY

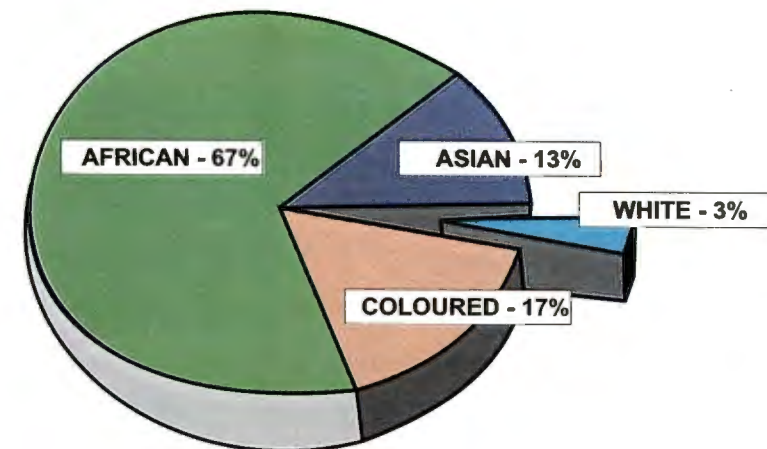
SOUTH AFRICA - 1997

[TITB report]



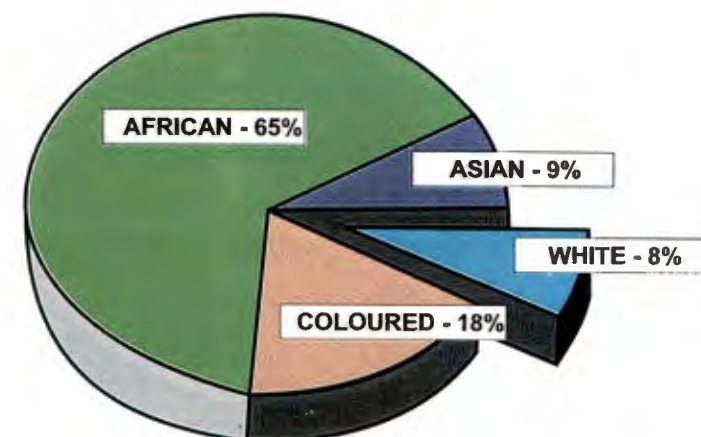
SOUTH AFRICA - 1990

[NPI report]



SOUTH AFRICA - 1991

[TITB report]



ALL EMPLOYEES

RACIAL CLASSIFICATION

1997 TITB REPORT : 94 COMPANIES

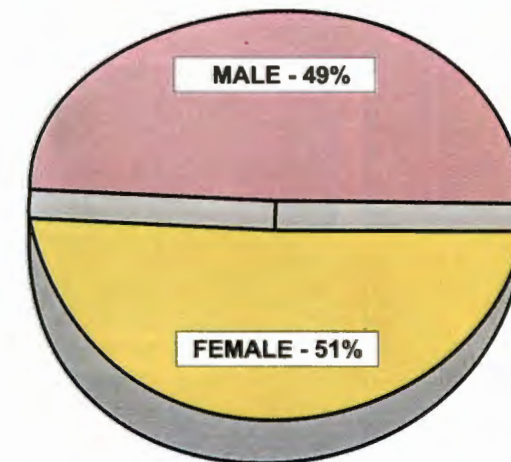
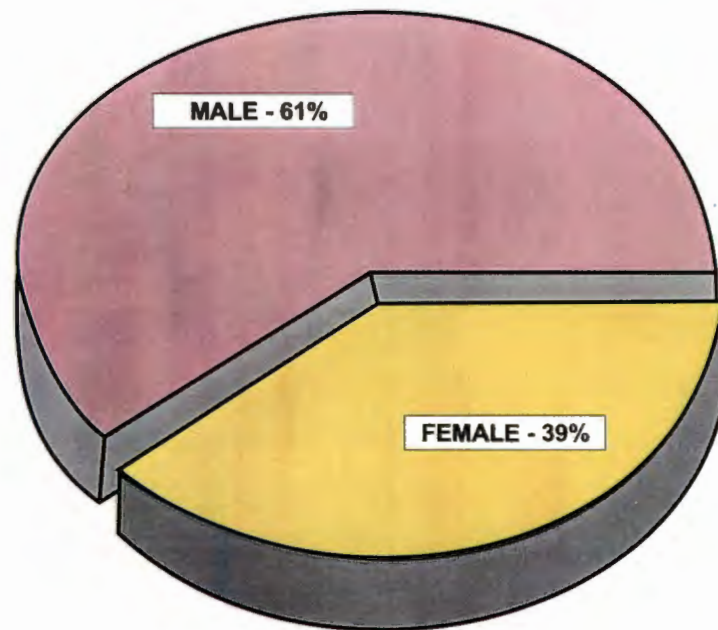
1990 NPI REPORT : 17 COMPANIES

1991 TITB REPORT : 31 COMPANIES

SOUTH AFRICA - 1997

[TITB report]

[NPI report]



ALL EMPLOYEES

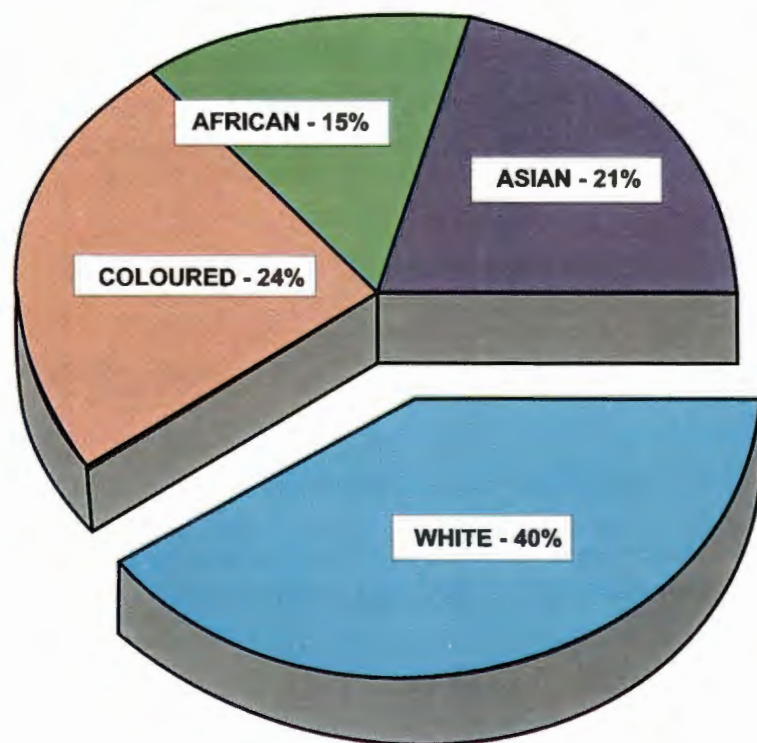
GENDER CLASSIFICATION

1997 REPORT : 94 COMPANIES

1990 NPI REPORT : 17 COMPANIES

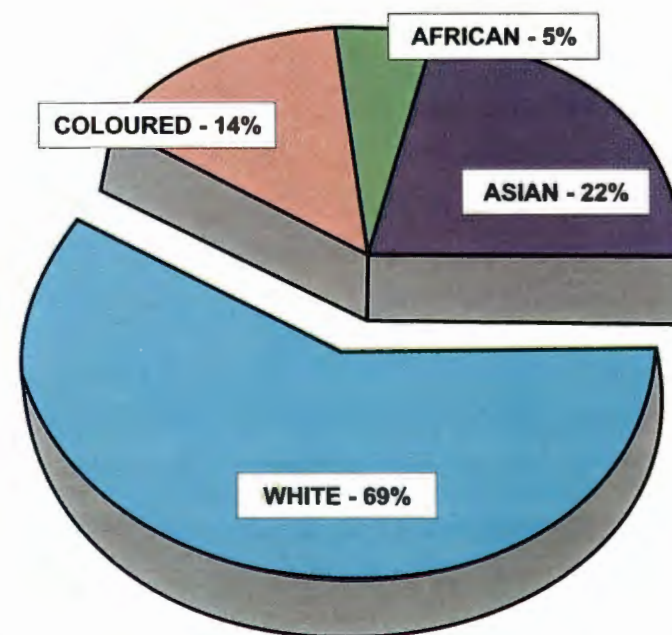
SOUTH AFRICA - 1997

[TITB report]



SOUTH AFRICA - 1990

[NPI report]



ARTISANS / TECHNICIANS

RACIAL CLASSIFICATION

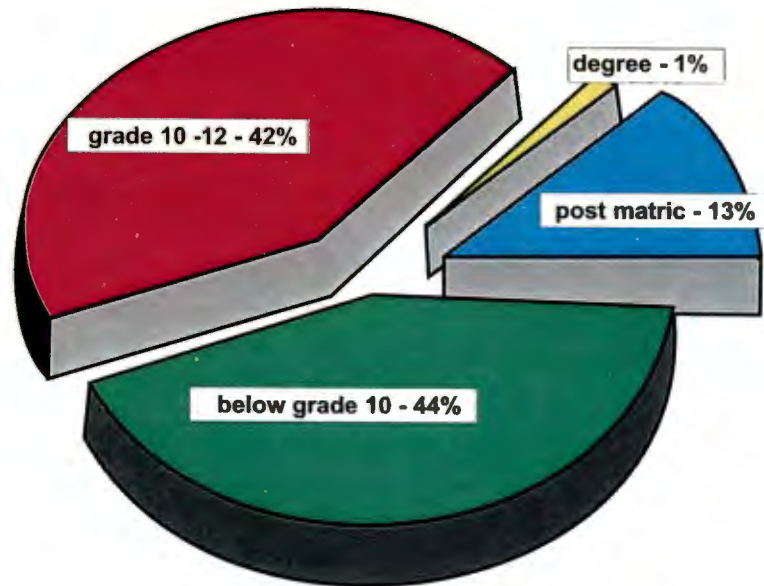
[FEMALES MADE UP 2%]

1997 TITB REPORT : 94 COMPANIES

1990 NPI REPORT : 17 COMPANIES

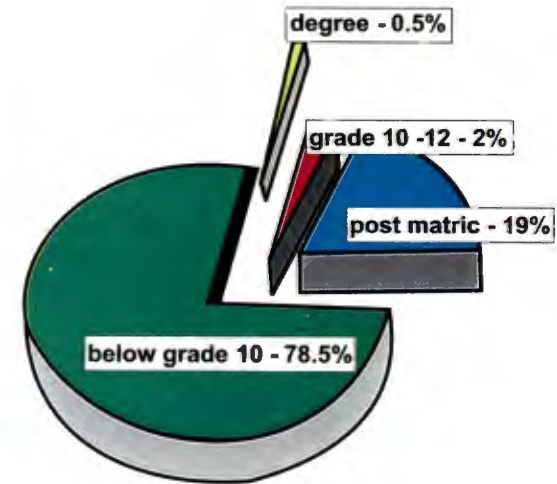
TITB report

1997



[NPI report]

1990



QUALIFICATIONS OF ARTISANS / TECHNICIANS

[ACADEMIC]
SOUTH AFRICA

1997 TITB REPORT : 111 COMPANIES

1990 NPI REPORT : 13 COMPANIES

Ref 11

QUALIFICATIONS OF MANAGERS

[ACADEMIC]

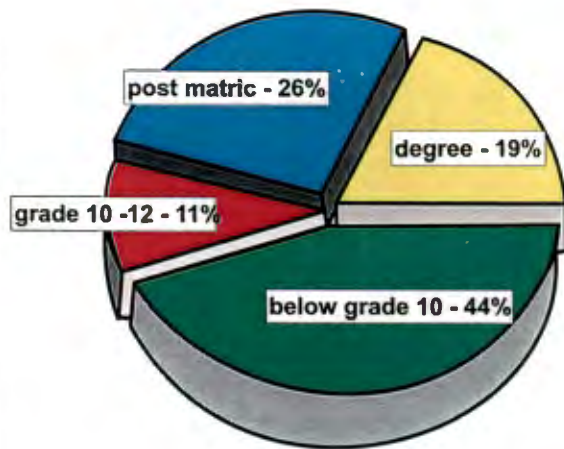
SOUTH AFRICA

1997 TITB REPORT : 111 COMPANIES

1990 NPI REPORT : 13 COMPANIES

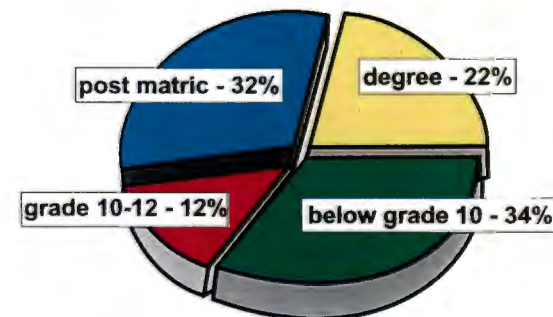
TITB REPORT

1997



NPI REPORT

1990



NOTE: grade 10 - 12 = std. 8 - 10 or N1 - N3

Below grade 10 - 12 = below std. 8 or below N1 (ie up to and including std 7)

Ref 10

QUALIFICATIONS OF SUPERVISORS

[ACADEMIC]

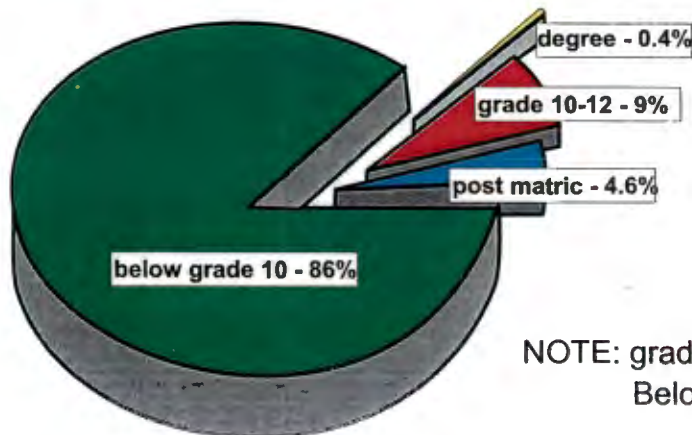
SOUTH AFRICA

1997 TITB REPORT : 111 COMPANIES

1990 NPI REPORT : 13 COMPANIES

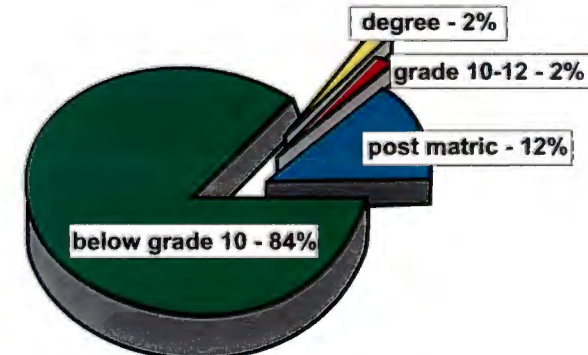
TITB REPORT

1997



NPI REPORT

1990



NOTE: grade 10 - 12 = std. 8 - 10 or N1 - N3

Below grade 10 - 12 = below std. 8 or below N1 (ie up to and including std 7)

PERSONNEL ACTIVITIES

ref 12

Are the following available ▼ Number of companies per region - 1997	KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]	SOUTH AFRICA 1990 - NPI [21]
EMPLOYEE DEVELOPMENT PROGRAMMES	15	4	11	5	35 [32%]	
TRAINING POLICIES	21	4	18	7	50 [45%]	
JOB SPECIFICATIONS	33	5	22	11	71 [64%]	[81%]
JOB DESCRIPTIONS	34	6	26	12	78 [70%]	[90%]
JOB EVALUATIONS	not asked	not asked	not asked	not asked	not asked	[62%]
EMPLOYEE STUDY LOANS	23	6	24	9	62 [56%]	
SCHOLARSHIPS	9	1	9	3	22 [20%]	
BURSARIES	12	4	8	4	28 [25%]	
Are the following in operation ▼						
PERFORMANCE APPRAISALS	21	6	17	8	52 [47%]	[71%]
SUCCESSION PLANNING	20	7	7	6	40 [36%]	[62%]
MANPOWER PLANNING	23	5	11	10	49 [44%]	[62%]

Human resource staff identified as the most difficult to replace / recruit, in order of priority :

- 1 Human Resource Director / Training Manager / Training officer
- 2 Personnel Manager / Instructor
- 3 Personnel Officer

TRAINING STAFF

ref 13a

INDICATE WHICH TRAINING STAFF HAVE SKILLS / ABILITIES & EXPERIENCE IN THE FOLLOWING AREAS: ▼	INSTRUCTORS		TRAINING OFFICERS		SENIOR TRAINING OFFICIALS	
	[98] 13 years		[52] 11 years		[22] 15 years	
Total number [....] 23						
PRACTICAL MILL EXPERIENCE (Average number of years) 23						
OHSACT	11		27		64	
JOB GRADING SYSTEMS	2		27		68	
ISO PRINCIPLES	27		23		68	
INDUSTRY TRAINING BOARDS - TITB, CITB, MEIETB	3		21		59	
SA EDUCATION SCHOOLS, COLLEGES, TECHNIKONS, UNIVERSITIES	24		27		73	
LABOUR RELATIONS ACT & MTA - LABOUR TRAINING ACT	3		17		91	
NATIONAL TRAINING BOARD INITIATIVES - SAQA, NQF	5		19		59	
INTERNATIONAL COMPETITIVENESS / STANDARDS / BENCHMARKING	1		8		55	
ORGANISATIONAL CHANGE / CURRENT LABOUR MARKET TRENDS	1	0	14	14	59	59
TRAINING RECORDS SYSTEM	34		48		73	
COMPUTER LITERACY	9		33		95	
REPORT & MEMO WRITING	19		44		100	
OUTSIDE COURSE ORGANISER	4		38		82	
CONTRACTS - GRADUATE, TECHNOLOGIST, APPRENTICE	1		19		73	
APPRAISAL SYSTEMS / CBMT ASSESSOR	4	4	21	0	68	64
EVALUATION SKILLS	15		38		82	
ASSESSMENT CENTRES / RECOGNITION OF PRIOR LEARNING	1	2	12	0	41	41
STATISTICS / TESTING SKILLS - PSYCHOMETRIC	4	4	19	19	50	55
INTERVIEWING SKILLS	7		33		86	

INDICATE WHICH TRAINING STAFF HAVE SKILLS / ABILITIES & EXPERIENCE IN THE FOLLOWING AREAS: ▼	INSTRUCTORS		TRAINING OFFICERS		SENIOR TRAINING OFFICIALS	
ADULT MOTIVATION / PRESENTATION SKILLS	10	13	35	35	50	82
INSTRUCTION TECHNIQUES	38		46		91	
ABE & LIFE SKILLS CO-ORDINATOR	7		21		100	
FACILITATION SKILLS / DISTANCE LEARNING FACILITATOR	8	11	27	25	41	50
COUNSELLING SKILLS / COACHING & MENTORING SKILLS	12	9	35	35	50	77
JOB ANALYSIS / MULTISKILLING	8	13	35	31	64	68
CBMT PRINCIPLES	4		21		64	
TRAINING AIDS BOARDS, CHARTS, SAMPLES, MODELS, OHP, SLIDES, VIDEO	17		52		91	
COURSE / TRAINING MANUAL DEVELOPMENT SKILLS	15		38		86	
APPRENTICE CONTROLLER SKILLS	8		19		68	
PROBLEM SOLVING SKILLS	29		37		95	
LEADERSHIP / I.R. SKILLS	5	2	27	21	73	100
RECRUITMENT & SELECTION	3		25		86	
BUDGETING & COSTING	2		17		68	
HR MANAGEMENT / TRAINING MANAGEMENT SKILLS	0	1	10	17	59	73
TEAM BUILDING SKILLS	9		25		86	
TELEPHONE SKILLS	27		31		73	
TRAINING NEEDS ANALYSIS SKILLS	9		38		91	
DATA GATHERING TECHNIQUES	8		38		77	
SUCCESSION PLANNING SKILLS	0		15		59	
EMPLOYEE ASSISTANCE PROGRAMMES	7		27		82	
TRAINING STRATEGY PLANNING SKILLS	2		19		73	
CAREER DEVELOPMENT SKILLS	232		13		73	
EQUAL EMPLOYMENT & AFFIRMATIVE ACTION	328		23		95	

SURVEY QUESTIONS ▼ Number of companies per region **		KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]
Does the company require TRAINING from LOCAL or OVERSEAS SPECIALISTS		26 *	7	25	13	71
If YES, would the company like the TITB to be the CO-ORDINATOR of such courses		15	7	15	13	50
If YES, what are the MOST URGENT SKILLS needing attention	1	All modern looms	Airjet mechanician	All modern looms	Management skills	
	2	Wet process	Raising machine	Knitting mech.	Textile machinery	
	3	Knitting mech.	Fibre technology	Wet process	Electrical	
Would the company be willing to have such courses conducted on the premises		15	5	14	9	43
Does the company have employees with specialist skills, who would be willing to conduct such courses - at a fee		6	2	6	6	20
If YES, in what SKILLS	1	Various looms	Weaving / non woven	Various looms	Various looms	
	2	Carding / needling	Yarn production	Non woven	Knitting	
	3	Winding			Training skills	

* Number of companies which provided a positive response

SURVEY QUESTIONS ▼		KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]
QUALIFIED TECHNOLOGISTS		88	27	34	12	161
ANTICIPATED number to be SPONSORED in next 5 years		97	17	31	20	165
Is there a need for a POST DIPLOMA COURSE [B-Tech] in TEXTILE TECHNOLOGY	YES	21	4	12	6	43
	NO	8	2	5	1	16
	No comment	12	2	23	15	52
If YES, FORMAT ? [from those who answered yes]	PART TIME	19	4	11	4	38
	FULL TIME	2	0	1	2	5
WOULD YOU SUPPORT SUCH A COURSE [from those who answered yes]	YES	19	4	11	5	39
	NO	2	0	1	1	4

RATING : Quality of the course (as reflected in the academic competence & post study work performance of diplomats) over the past few years

COMPANIES WITH STUDENTS	34	COMPANIES WITHOUT STUDENTS	77	POOR	0 %	REASONABLE / GOOD	68 %	EXCELLENT	32 %
--------------------------------	-----------	-----------------------------------	-----------	-------------	------------	--------------------------	-------------	------------------	-------------

SURVEY QUESTIONS ▼		KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]
PRESENT ENROLLMENT on TECHNISA STUDIES	N1-N3	220	58	25	16	319
	N4-N6	38	16	26	4	84
ANTICIPATED number to be ENROLLED in next 2 years	N1-N3	229	26	73	27	355
	N4-N6	61	10	26	7	104
Would the Company support regional satellite lectures or workshops related to study material if made available	YES	24 [13138]*	2 [4001]	19 [7948]	10 [4869]	55 [29956]
	NO	1	1	2	0	4
	No comment	16	5	19	12	52

* [.....] Represents number of EMPLOYEES involved.

RATING : Quality of the course (as reflected in the academic competence & post study work performance of students) over the past few years

COMPANIES WITH STUDENTS	24	COMPANIES WITHOUT STUDENTS	87	POOR	4 %	REASONABLE / GOOD	73 %	EXCELLENT	23 %
----------------------------	----	-------------------------------	----	------	-----	-------------------	------	-----------	------

COMMENTS SUBMITTED:

- 1 Urgent need for Technisa administration to improve / too many delays
- 2 Need courses to cover :
FIBRE MANUFACTURE / EXTRUSION
TEXTILE CALCULATIONS
CARPET MANUFACTURE

Core training courses with a strong customisation element being offered by the CSIR, are listed below. Numbers indicate the number of companies responding positively, & requesting training in each region

Ref 18

O= Operator, S=Supervisor, M=Middle / Senior Managers.

	COURSE	DURATION [DAYS]	NEED YES	LEVEL			LOCATION					
				O	S	M	PORT/EL	DURBAN	C/TOWN	E/LONDON	JO'BURG	IN-COMP
01	SUPERVISORY MANAGEMENT	4 - 6	53	4	49	22	2	19	18	1	6	14
02	GENERAL DYEING THEORY	6	33	15	29	6	1	11	11	1	4	6
03	GENERAL DYEING (THEORY & PRACTICAL)	10	33	17	31	6	1	10	12	2	4	6
04	BASIC DYEING PRINCIPLES	4 - 5	33	21	25	2	1	12	11	1	2	6
05	COLOUR PHYSICS	1 - 2	15	6	13	5	1	7	4	1	0	2
06	SHORT STAPLE SPINNING	6	12	7	11	0	1	4	4	1	1	1
07	SPECTROGRAM	1	10	1	8	5	1	5	2	1	0	2
08	LONG STAPLE SPINNING	6	7	3	7	0	1	2	2	1	0	2
09	INTRODUCTION TO GENERAL TEXTILES	3 - 5	35	21	29	12	1	7	17	1	5	7
10	SCOURING & TOP MAKING	3 - 4	1	0	1	0	0	0	0	0	0	1
11	WARP PREPARATION	5	21	18	19	5	0	8	6	1	5	4
12	STATISTICAL PROCESS CONTROL	1 - 2	29	9	25	16	2	11	9	0	3	6
13	QUALITY CONTROL TOOLS	3	37	16	33	23	2	11	12	1	5	9
14	ISO 9002 TRAINING	1 - 3	24	12	21	24	2	8	6	0	3	5
15	MANAGEMENT BRIEFING / WORKSHOP : TQM	1	31	5	23	28	2	8	12	1	4	6
16	MANAGEMENT BRIEFING / WORKSHOP : ENVIRONMENTAL MANAGEMENT	1	22	3	11	21	0	7	8	1	4	4

List any other courses, not included in the above, which you believe your company or the Textile Industry, may need the CSIR to develop and offer.

Courses / programmes requested include :

AIRJET TECHNOLOGY

O.E. SPINNING TECHNOLOGY

FINISHING of WORSTED FABRICS

CIRCULAR KNITTING TECHNOLOGY

NON-WOVEN TECHNOLOGY

WARP KNITTING (design & fabric
construction)

ref 17

SURVEY QUESTIONS ▼		KWAZULU NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]
TOTAL APPRENTICES & TECHNICAL TRAINEES		98	33	46	12	189
TOTAL APPRENTICES INDENTURED with the TITB		32	18	4	4	58
ANTICIPATED number of APPRENTICES to be REGISTERED in next 5 years		125	39	58	49	271
PRIORITY TRADES for APPRENTICES	1	Weaving mechanician	Weaving mechanician	Weaving mechanician	Weaving mechanician	Weaving mechanician
	2	Wet process controller	O E mechanician	Wet process controller	Wet process controller	Wet process controller
	3	Knitting mechanician	Spinning mechanician	Knitting mechanician	Knitting mechanician	Knitting mechanician
ANTICIPATED number to UNDERGO SECTION 28 TRADE TEST in next 2 years		62	17	21	15	115
PRIORITY TRADES for SECTION 28 TRADE TESTS	1	Spinning trades	O E mechanician	Fitter	Weaving mechanician	Weaving mechanician
	2	Weaving mechanician	Weaving mechanician	Weaving mechanician	Knitting mechanician	Wet process controller
	3	Electrical / electronic	Wet process controller	Spinning / Wet process	Wet process controller	Spinning trades

RATIO OF EMPLOYEES per JOB DESIGNATION

TOTAL INDUSTRY STATISTIC

EMPLOYEES per ▼ Number of companies per region - 1997	KWAZUL U NATAL [41]	EASTERN CAPE [8]	WESTERN CAPE [40]	GAUTENG & OTHER [22]	SOUTH AFRICA [111]	SOUTH AFRICA 1990 - NPI	SOUTH AFRICA 1991 - TITB
MANAGER	26	38	25	22	26	37	
SUPERVISOR	13	15	12	15	13	19	
ARTISAN / TECHNICIAN	19	24	20	35	21		
PERSONNEL MANAGER	851	1010	732	1189	835	867	1280
PERSONNEL OFFICER	522	1010	655	445	604		
TRAINING MANAGER	2024	1769	1780	1189	1786	1067	840
TRAINING OFFICER	851	543	1038	509	755		670
INSTRUCTOR	316	392	444	All line function	400		570
ARTISANS / TECHNICIANS per APPRENTICE / TRAINEE	8	9	13	8	9		
ARTISANS / TECHNICIANS per INDENTURED APPRENTICE	26	16	148	25	31		

IN SOME COMPANIES, OTHER PERSONNEL FULFILL A TRAINING FUNCTION ie PERSONNEL MANAGER

COMMENTS on the SKILLS AUDIT

- 1 **MANPOWER DEVELOPMENT PROGRAMME (page 5 - 6)**
 - Relatively minor use of CSIR, NPI or SABS (significant in terms of world class quality)
- 2 **ABE (Page 7)**
 - Relatively few companies provide ABE
 - 40% of employees represented
 - Mainly internal providers used to deliver (Standards, success rates ?)
 - 27 % of the companies requested assistance
 - 23 % requested no assistance
 - 50 % no comment
- 3 **TRAINING OF ALL EMPLOYEES - EXCLUDING MANAGERS (page 8 - 11)**
 - See summary in annexure
 - 79 % have no access to CBMT modules
 - Concern over the low number of certificates provided - limited recognition for skills acquired
- 4 **RACIAL & GENDER CLASSIFICATION (page 13 - 18)**
 - Included for general information
- 5 **ACADEMIC PROFILES (page 19 - 20)**
 - Included for general information
- 6 **PERSONNEL ACTIVITIES (page 21)**
 - 68 % of companies have no employee development programmes
 - 55 % of companies have no training policies
 - 36 % of companies have no job specification
 - 30 % of companies have no job descriptions
 - 53 % of companies have no performance appraisals
 - 64 % of companies have no succession planning
 - 56 % of companies have no manpower planning

- 7 **TRAINING STAFF (page 22 & 23)**
 - Generally reflects an area of major concern
- 8 **SPECIALIST TRAINING (page 24)**
 - 71 companies indicated they required specialist training
 - 50 companies indicated they wanted the TITB to co-ordinate the initiative
 - 20 companies have employees who would assist with conducting such courses
- 9 **TEXTILE TECHNOLOGISTS (page 25)**
 - Relatively few textile technologists in Western Cape compared with KZN
 - Relatively few textile technologists expected to be sponsored in Western Cape compared to KZN
 - Significant interest in a B-Tech in textile technology
 - A large number of companies have no textile technologists (77 or 69 %)
- 10 **TECHNISA (page 26)**
 - Very few students in the Western Cape
 - Very few anticipated enrollments in Western Cape
 - Approximately 50 % of companies would support satellite centres
 - Large number of companies without students (87 or 78 %)
 - Most companies rated Technisa as reasonable / good or excellent
- 11 **CSIR (page 27)**
 - An overwhelming request for regional courses
- 12 **APPRENTICES / TRAINEES (page 28)**
 - Relatively large increase in apprentice registration in next five years
 - Relatively large number of expected section 28 trade tests
 - Note priority trades
- 13 **RATIO OF EMPLOYEES per JOB DESIGNATION**
 - Note ratio problem areas

ANNEXURE

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

TRAINING NOT CONDUCTED IN PRIORITY ORDER

No	Training Programme	Approx number	%
1.	Interpersonal skills	29441	88.3
2.	Decision making	22471	67.4
3.	Productivity	21748	66.2
4.	Quality systems	15189	45.6
5.	Machine and equipment knowledge	14559	43.7
6.	Process knowledge	14005	42.0
7.	Fault identification and correction	12859	38.6
8.	Company benefits	12399	37.2
9.	Job specific safety	11356	34.0
10.	Operator skills and duties	11323	33.9
11.	Induction	10239	30.7
12.	General safety	9153	27.4
13.	Company rules and regulations	8649	25.9
		193391	

Note:

3. The above priority listing refers only to the core competencies and generic skills as identified on pages 8 to 12 in the report.
4. ABE is not included as it is dealt with in a separate section.

Operational Area	Number of Companies with OA	Average number of employees in each OA	TRAINING NOT CONDUCTED - TRAINING NEEDED - NUMBERS OF PEOPLE												
			Induction	Company benefits	General safety	Company rules & regulations	Inter-personal skills	Productivity	Decision making	Quality systems	Job specific safety	Process knowledge	Operator skills & duties	m/c & equipment knowledge	Fault identification & correction
Fibre manufacture	6	495	248	248	248	248	332	332	332	248	248	248	248	248	248
Texturizing	3	155	104	104	104	104	104	104	104	104	104	104			
Drawing \ filaments	1	130	0	0	0	0	0	0	0	0	0	0	0	0	0
Raw materials	65	765	306	428	268	283	719	612	92	329	398	474	444	497	505
Blow room \ blending	39	535	219	289	203	203	535	455	481	235	246	289	273	342	300
Carding	38	655	157	177	137	137	655	517	550	295	157	242	209	295	275
Combing	19	470	122	221	99	122	470	395	395	197	150	197	150	226	221
Drawing	29	545	115	153	131	131	507	414	469	262	169	245	169	245	262
Roving \ top making	18	585	193	293	194	194	550	486	550	257	193	228	228	257	269
Spinning	34	2595	623	986	623	674	2517	1920	2205	1064	830	1063	752	1220	986
Rotor \ OE spinning	19	570	211	302	182	211	570	507	479	239	211	268	239	302	268
Winding	53	2025	688	911	688	871	1903	1458	1762	952	770	851	648	952	871
Double uptwisting	36	1205	301	470	265	301	1133	807	1000	398	229	470	265	506	506
Knitting	41	1640	525	754	394	361	1361	1000	1394	836	672	804	476	640	640
Warping \ sizing	52	1045	324	303	240	178	940	763	909	460	282	387	261	397	345
Drawing-in knotting	38	500	145	130	105	55	460	330	420	195	145	195	105	185	160
Weaving	46	2960	829	829	651	326	2694	207	252	1036	770	1154	651	829	651
Non- woven	12	330	165	109	109	83	304	274	248	139	109	139	165	248	165
Woven carpets	4	245	0	0	0	0	245	61	245	61	61	61	0	0	0
Tufted carpets	6	280	140	140	65	48	232	232	232	188	48	92	92	188	140

Needle punch carpets	4	495	124	248	124	0	248	371	371	248	0	0	248	248	0
Dyeing preparation	47	875	263	350	245	228	796	525	210	411	280	298	228	298	315
Dyeing \ bleaching	60	1515	379	409	273	197	1364	864	348	561	333	455	303	409	409
Printing	18	500	55	85	30	55	390	250	305	110	30	85	55	55	85
Finishing	61	2455	638	761	565	491	2259	1645	1939	1080	761	1007	638	1056	933
Inspection	69	2025	506	587	466	344	1823	1256	1377	770	587	729	587	870	527
Laboratory	68	835	309	334	284	292	710	601	568	409	342	334	359	359	225
Despatch \ stores	89	1545	478	541	464	448	1390	1159	1282	865	587	865	819	819	850
Sales	71	925	407	426	416	444	703	833	675	574	601	509	611	666	611
Personnel \ training	64	530	196	196	191	191	350	382	350	276	233	276	265	323	292
Administration	90	1455	669	684	640	713	1120	1164	1019	989	931	975	917	1033	989
General engineering	70	1345	444	498	404	390	1116	955	1022	726	484	686	672	592	551
Boiler house	58	500	170	205	165	140	455	395	400	285	155	275	200	190	190
Drivers	81	600	186	228	180	186	486	474	486	390	240	0	294	312	318
		33330	10239	12399	9153	8649	29441	21748	22471	15189	11356	14005	11323	14559	12859
			30.7	37.2	27.4	25.9	88.3	66.2	67.4	45.6	34.0	42.0	33.9	43.7	38.6

RESPONDENTS / COMPANIES PARTICIPATED IN THE SAMPLE

Respondents	Position	Code	Company
1	Training Manager	1	Aranda Textile Mills
2	Performance Analyst / Training Manager	1	Aranda Textile Mills
3	Training Officer / Manager	2	Aunde Tap
4	Training Manager	3	Belgotex Carpets
5	Training Manager	4	Berg River Textiles
6	Training Manager	5	BiTrim Tweads
7	Training Manager	6	BMD Textiles
8	Training Officer	7	C.I.T.B
9	Training Manager	7	C.I.T.B
10	Head of Technical Department	7	C.I.T.B
11	Training Officer (Technicians)	7	C.I.T.B
12	Instructor	7	C.I.T.B
13	Instructor	7	C.I.T.B (Cape Town)
14	Training Manager	7	C.I.T.B
15	Instructor	7	C.I.T.B
16	Regional Training Manager	7	C.I.T.B
17	Regional Training Manager	7	C.I.T.B
18	HAD Manager	7	C.I.T.B
19	Instructor	8	Coastal Group
20	Training Manager	9	Da Gama
21	Training Officer	9	Da Gama
22	Training Officer	9	Da Gama
23	SDF (External Consultant)	10	Edcon Manufacturers
24	Group Training Manager	11	Small companies
25	Senior Training Officer	12	Frame Textiles
26	Senior Training Instructor	12	Frame Textiles
27	Training Manager	12	Frame Textiles

Respondents	Position	Code	Company
28	Training Officer	12	Frame Textiles
29	Training Officer	12	Frame Textiles
30	Training Officer	12	Frame Textiles
31	Training Manager	12	Frame Textiles
32	Training Officer	13	Gelvenor Textiles
33	Training Officer	13	Gelvenor Textiles
34	SDF (External consultant)	14	Small companies
35	Human Resources Manager	15	Hextex
36	Personnel Officer	15	Hextex
37	Group Training Manager	16	Industex Holdings
38	Training Officer	16	Industex Holdings
39	Training Officer	16	Industex Holdings (PE)
40	Training Officer	16	Industex Holdings
41	Senior Training Officer	16	Industex Holdings
42	Training Officer	16	Industex Holdings (PE)
43	Training Officer	16	Industex Holdings
44	Training Officer	16	Industex Holdings
45	Human Resources Manager	17	Ninian & Lester Textiles Division
46	Human Resources Manager	18	National Convertor Industries
47	Line Manager	19	SA Fine Worsted
48	Training Manager	20	Sans Fibres
49	Training Manager	20	Sans Fibres
50	Snr Learning Facilitator	20	Sans Fibres
51	Contract Trainer / Consultant	20	Sans Fibres
52	Training Officer	20	Sans Fibres
53	Human Resources Director	21	SA Clothing Industries
54	Instructor	22	SBH Cotton Mills
55	Training Manager	22	SBH Cotton Mills
56	Training Manager	22	SBH Cotton Mills
57	Instructor	22	SBH Cotton Mills

Respondents	Position	Code	Company
58	Human Resources Manager	23	Standerton Mills
59	Human Resources Manager	24	Svenmill
60	SDF (External Consultant)	25	Technical Training Services
61	Skills Development Facilitator (Ext cons)	26	Textiles and Tuition and Training CC
62	Human Resources Manager	27	Toga Linings
63	SDF (External Consultant)	28	Tongaat Textiles
64	Snr Training Officer / Skills	28	Tongaat Textiles
65	Development Facilitator	29	Towels Edgar Jacobs
66	ETD Practitioner	30	Toyla Training
67	SDF (External Consultant)	31	Ulster Carpet Mills
68	Human Resources Officer	32	VOC Investments (Celrose)
69	Human Resources Manager	33	Waverley Blankets (EL)
70	Human Resources Manager	34	Small companies
	SDF (External Consultant)		

CLOTHING, TEXTILES, FOOTWEAR AND LEATHER SETA

3rd Floor, Umdoni
28 Crompton Street
PINETOWN 3610

P O Box 935
PINETOWN

Tel: (031) 702 4482/83/84
Fax: (031) 702 4113

E-mail: titb@mweb.co.za

Date: 16 August 2000

Dear Madam / Sir

Research Project: The development of roles, competencies and outcomes for ETD facilitators in the Textile Industry

The Textile Industry has identified an urgent need to upgrade the competencies of ETD practitioners / facilitators at various levels. Within organisations. The objective is to build the ETD training capacity of the sector in its quest to advance the objective of the Textile Qualifications Framework (TQF).

It is therefore of vital importance to review the roles, competencies and learning outcomes of ETD practitioners/facilitators in the sector with a view to realign it to the dynamics of the new Training Legislation and changing economic environment.

All ETD practitioners/facilitators within an organisation, whether employed full-time or as a consultant, and irrespective of the decision-making level is to complete the questionnaire. Do not write your name on the questionnaire – it remains anonymous.

The questionnaire is divided into three (3) sections:

- Section A deals with ETD roles
- Section B deals with ETD competencies
- Section C deals with ETD learning outcomes

Terms of Reference

- Roles refer to a cluster of behaviour; an activity area.
- Competencies refer to underlying skills required to enact the role
- Outcomes refer to what a person has to be able to do to achieve a particular standard.

It is envisaged that the research findings will benefit the textile sector as follows:

- Determine the ETD capacity of the sector
- Identify strategic skills development priorities for ETD practitioners
- Specify the roles, competencies and learning outcomes of ETD practitioners
- Plan training and development initiatives for ETD practitioners in the sector arising from the findings of the research.

The Textile Chamber of the CTFL SETA will administer and co-ordinate the investigation. Completed questionnaires should be returned to the following address;

The Textile Chamber Manager

CTFL SETA

P O Box 935

Pinetown, 3600

Or

E-mail: titb@mweb.co.za

Fax: (031) 702-41123

The due date is 31 August 2000.

We thank you for participating in the questionnaire activities and your involvement is highly appreciated.

Yours faithfully

David Bowen

CEO

CTFL SETA

SECTION A: ETC ROLES IDENTIFICATION

The purpose of this section is to determine which **ETD roles** are performed in organisations, at what **occupational level** and the **focus** of the role.

INSTRUCTIONS:

- 1. The first column indicates the various roles in ETD and a description of each role.
- 2. Indicate in the second column if you are performing this role in your company. If the role is not performed in your company, skip to the next role. If the role is performed, go to step 3.
- 3. Indicate in the third column with a tick (✓), the level at which the role is performed (instructor, training officer, manager, line responsibility or external consultant). Paterson grading bands are given as guideline to indicate capability / decision making level.
- 4. Finally, go to the last column on the right and indicate with a tick (✓) the focus of the role (whether technical, behavioural, administrative, ABET, or a combination of role focus).

Example:

ETD Role and Description	Do you Perform This role	Role level in organisation					Role focus			
		Instructor	Training Officer	Training Manager	Line Position	External Consultant	Technical	Behavioural	Admin	ABET
		Grade B	Grade C	Grade D	Grade B- D	Grade B - D	Operator skills Mechanician Technologist	Supervisory Management Leadership	ETD Support Logistical backup	Numeracy Literacy Life Skills
HRD Manager Ensuring that the structured learning process, learning outcomes and assessment of outcomes are effective through co-ordination of ETD related activities.	☒ Yes ☐ No			✓			✓	✓		

General information

- Position of person completing the questionnaire: _____
- Company's name: _____
- Size of organisation: (tick appropriate block)

Small 1-49	Medium 50 - 199	Large 200 +
----------------------	---------------------------	-----------------------

ETD Role and Description	Do you Perform This role	Role level in organisation					Role focus			
		Instructor	Training Officer	Training Manager	Line Position	External Consultant	Technical	Behavioural	Admin	ABET
		Grade B	Grade C	Grade D	Grade B - D	Grade B - D	Operator skills Mechanician Technologist	Supervisory Management Leadership	ETD Support Logistical backup	Numeracy Literacy Life Skills
1. HRD Manager Ensuring that the structured learning process, learning outcomes and assessment of outcomes are effective through co-ordination of ETD related roles / activities.	☐ Yes ☐ No									
2. Needs Analyst Identifying learning and development needs of both individuals and groups or organisation.	☐ Yes ☐ No									
3. Learning Materials Developer Developing learning materials that will assist practitioners and learners in achieving learning objectives.	☐ Yes ☐ No									

ETD Role and Description	Do you perform this role	Role level in organisation					Role focus			
		Instructor	Training Officer	Training Manager	Line Position	External Consultant	Technical	Behavioural	Admin	ABET
		Grade B	Grade C	Grade D	Grade B- D	Grade B – D	Operator skills Mechanician Technologist	Supervisory Management Leadership	ETD Support Logistical backup	Numeracy Literacy Life Skills
4. Learning Experience Designer Designing interventions in terms of outputs and outcomes, learning opportunities and delivery to enable learning.	☐ Yes ☐ No									
5. Individual Learning Facilitator Guiding interventions that enable individual learning needs to be satisfied.	☐ Yes ☐ No									
6. Group Learning Facilitator Guiding interventions that enable individuals or groups to learn in a group context.	☐ Yes ☐ No									
7. Assessor Assessing the competency status of individuals against agreed quality standards / outcomes, using outputs and outcomes as the basis for evidence.	☐ Yes ☐ No									
8. Evaluator Evaluating the impact of ETD in the effectiveness of individuals or organisations.	☐ Yes ☐ No									

ETD Role and Description	Do you perform this role	Role level in organisation					Role focus			
		Instructor	Training Officer	Training Manager	Line Position	External Consultant	Technical	Behavioural	Admin	ABET
		Grade B	Grade C	Grade D	Grade B- D	Grade B – D	Operator skills Mechanician Technologist	Supervisory Management Leadership	ETD Support Logistical backup	Numeracy Literacy Life Skills
9. Administrator Providing support and logistics backup for the enablement of training.	☐ Yes ☐ No									
10. Strategist Formulating plans for training and development, organisation, policies and practices to accommodate their vision and mission.	☐ Yes ☐ No									
11. Development Counsellor Supporting learners through processes of dealing with psycho-social problems and advice to learners on resources, study methods, learning pathways and organisational expectations.	☐ Yes ☐ No									

SECTION B: ETD COMPETENCIES IDENTIFICATION

The purpose of this section is to determine which competencies are strengths and which competencies we need to develop.

Instructions:

1. Column one indicates the general competencies; training and development competencies; distribution method competencies; and presentation method competencies linked to the various ETD Roles with a description of each individual competency (53 competencies).
2. On a scale from 0 to 6, indicate how proficient you are in this competency. Use the following definitions to help you identify the level of your expertise:
 - **None (0):** Possess very little knowledge of, or experience in, applying this competency to ETD practices.
 - **Basic (1-2):** Possess general understanding of key principles and is capable of making simple decisions regarding the proper application of this competency to ETD practices.
 - **Intermediate (3-4):** Possess a comprehensive understanding of key principles and is capable of making complex decisions regarding the application of this competency to ETD practices.
 - **Advanced (5-6):** Possess substantial knowledge and expertise and can work in complex situations that require the application of this competency to ETD practices

Use the higher number if you feel strongly that you have reached this level of expertise. Use the lower number if you are less confident that you have reached this level.

3. Cover up your “Current Level of Expertise” answers. Go to the last column on the right and rate on a scale from 1 to 4 how important you think this competency is for future success in the field of ETD. This assessment should be completely independent of which competencies you think you already have or don’t have. Here is what the numbers correspond to:

- 1: not important to future success
- 2: somewhat important to future success
- 3: important to future success
- 4: very important to future success.

Example:

	Current Level of Expertise							Future Importance			
General Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
1. Adult Learning: Understanding how adults learn and how they use knowledge, skills, and attitudes.	0	1	2	③	4	5	6	1	2	③	4

General Information:

- Position of person completing the questionnaire: _____
- Company’s name: _____
- Size of organisation: (tick appropriate block)

Small 1-49	Medium 50 – 199	Large 200 +
----------------------	---------------------------	-----------------------

General Competencies	Current Level of Expertise							Future Importance			
	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
1. Adult Learning: Understanding how adults learn and how they use knowledge, skills, and attitudes.	0	1	2	3	4	5	6	1	2	3	4
2. Instructional Design: Using the training cycle (analysis, design, development, delivery, evaluation) for creating adult learning interventions that fulfil organisational goals.	0	1	2	3	4	5	6	1	2	3	4
3. Performance Gap Analysis: Performing “front-end analysis” by comparing actual and ideal performance levels in the workplace. Identifying opportunities and strategies for improving performance	0	1	2	3	4	5	6	1	2	3	4
4. Change Management: Helping people adapt to the changes brought on by new technologies and helping them to see the value and benefits of new technologies.	0	1	2	3	4	5	6	1	2	3	4
5. Leadership: Leading, influencing, and coaching others to help them achieve desired results.	0	1	2	3	4	5	6	1	2	3	4
6. Industry Awareness: Understanding the current and future climate of one’s company’s industry and formulating strategies that respond to that climate.	0	1	2	3	4	5	6	1	2	3	4

Appendix E

	Current Level of Expertise							Future Importance			
General Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
7. Buy-in / Advocacy: Building ownership and support for workplace initiatives.	0	1	2	3	4	5	6	1	2	3	4
8. Interpersonal Relationship Building / Collaboration: Effectively interacting with others in order to produce meaningful outcomes.	0	1	2	3	4	5	6	1	2	3	4
9. Consulting: Helping clients and stakeholders to question their assumptions, determine their needs, and plan implementation strategies for achieving their goals.	0	1	2	3	4	5	6	1	2	3	4
10. Business Knowledge: Demonstrating awareness of business functions and how business decisions affect financial and non-financial work results.	0	1	2	3	4	5	6	1	2	3	4
11. Systems Thinking: Recognising the interrelationship among the driving forces that connect seemingly isolated incidents within the organisation. Also taking a holistic view of performance problems in order to find the root causes.	0	1	2	3	4	5	6	1	2	3	4
12. Contracting: Negotiating, organising, preparing, monitoring, and evaluating work performed by vendors and consultants.	0	1	2	3	4	5	6	1	2	3	4
13. Project Management: Assessing, planning, negotiating, organising, monitoring, and evaluating the delivery process. Effectively managing human, capital, and financial resources.	0	1	2	3	4	5	6	1	2	3	4

	Current Level of Expertise							Future Importance			
General Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
14. Communication: Applying effective verbal, non verbal, and written communication methods to achieve desired results.	0	1	2	3	4	5	6	1	2	3	4
15. Program Evaluation: Measuring the success of learning interventions.	0	1	2	3	4	5	6	1	2	3	4
16. Learning Technology Methods: Deciding which combination of instructional methods, presentation methods, and distribution methods will best deliver the final program to the learner.	0	1	2	3	4	5	6	1	2	3	4

Training and Development Competencies	Current Level of Expertise							Future Importance			
	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
17. Audio / Visual Skill: Selecting and using audio / visual hardware and software	0	1	2	3	4	5	6	1	2	3	4
18. Career Development Knowledge: Understanding the personal and organisational issues and practices relevant to individual careers.	0	1	2	3	4	5	6	1	2	3	4
19. Competency Identification Skill: Identifying the knowledge, skill, behaviour requirements of jobs, tasks, roles.	0	1	2	3	4	5	6	1	2	3	4
20. Computer Competence: Understanding and being able to use computers.	0	1	2	3	4	5	6	1	2	3	4
21. Cost-Benefit Analysis Skill: Assessing alternatives in terms of their financial, psychological, and strategic advantages and disadvantages.	0	1	2	3	4	5	6	1	2	3	4
22. Counselling Skill: Helping individuals recognise and understand personal needs, values, problems, alternatives, and goals.	0	1	2	3	4	5	6	1	2	3	4
23. Data Reduction Skill: Scanning, synthesising, and drawing conclusions from data.	0	1	2	3	4	5	6	1	2	3	4
24. Delegation Skill: Assigning task responsibility and authority to others.	0	1	2	3	4	5	6	1	2	3	4
25. Facilities Skill: Planning and co-ordinating logistics in an efficient and cost-effective manner.	0	1	2	3	4	5	6	1	2	3	4
26. Feedback Skill: Communicating opinions, observations, and conclusions such that they are understood.	0	1	2	3	4	5	6	1	2	3	4

Appendix E

Training and Development Competencies	Current Level of Expertise							Future Importance			
	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
27. Futuring Skill: Projecting trends and visualising possible and probable futures and their implications.	0	1	2	3	4	5	6	1	2	3	4
28. Group Process Skill: Influencing groups to both accomplish tasks and fulfil the needs of their members.	0	1	2	3	4	5	6	1	2	3	4
29. Intellectual Versatility: Recognising, exploring, and using a broad range of ideas and practices. Thinking logically and creatively without undue influence from personal biases.	0	1	2	3	4	5	6	1	2	3	4
30. Library Skill: Gathering information from printed and other recorded sources. Identifying and using information specialists and reference services and aids.	0	1	2	3	4	5	6	1	2	3	4
31. Model Building Skill: Developing theoretical and practical frameworks which describe complex ideas in understandable, usable ways.	0	1	2	3	4	5	6	1	2	3	4
32. Objectives Preparation Skill: Preparing clear statements which describe desired outputs.	0	1	2	3	4	5	6	1	2	3	4
33. Organisation Behaviour Understanding: Seeing organisations as dynamic, political, economic, and social systems which have multiple goals; using this larger perspective as a framework for understanding and influencing events and change.	0	1	2	3	4	5	6	1	2	3	4
34. Organisation Understanding: Knowing the strategy, structure, power networks, financial position, systems of a SPECIFIC organisation.	0	1	2	3	4	5	6	1	2	3	4

	Current Level of Expertise							Future Importance			
Training and Development Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
35. Performance Observation Skills: Tracking and describing behaviours and their effects.	0	1	2	3	4	5	6	1	2	3	4
36. Personnel / HR Field Understanding: Understanding issues and practices in other HR areas (Organisation Development, Organisation Job Design, Human Resource Planning, Selection and Staffing, Personnel Research and Information Systems, Compensation and Benefits, Employee Assistance, Union / Labour Relations).	0	1	2	3	4	5	6	1	2	3	4
37. Presentation Skills: Verbally presenting information such that the intended purpose is achieved.	0	1	2	3	4	5	6	1	2	3	4
38. Questioning Skills: Gathering information from and stimulating insight in individuals and groups through the use of interviews, questionnaires, and other probing methods.	0	1	2	3	4	5	6	1	2	3	4
39. Records Management Skill: Storing data in easily retrievable form.	0	1	2	3	4	5	6	1	2	3	4
40. Research Skills: Selecting, developing, and using methodologies, statistical, and data collection techniques for a formal inquiry.	0	1	2	3	4	5	6	1	2	3	4
41. Training and Development Field Understanding: Knowing the technological, social, economic, professional, and regulatory issues in the field: understanding the role T&D plays in helping individuals learn for current and future jobs.	0	1	2	3	4	5	6	1	2	3	4

	Current Level of Expertise							Future Importance			
Training and Development Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
42. Training and Development Techniques Understanding: Knowing the techniques and methods used in training: understanding their appropriate uses.	0	1	2	3	4	5	6	1	2	3	4
43. Writing Skills: Preparing written material which follows generally accepted rules of style and form, is appropriate for the audience, creative, and accomplishes its intended purposes.	0	1	2	3	4	5	6	1	2	3	4

Distribution Method Competencies	Current Level of Expertise							Future Importance			
	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
44. Cost Analysis / ROI of the Distribution Methods: Understanding the relative costs of each distribution method, or combination of methods, and assuring that the organisation is receiving a good value for the money spent on learning technologies.	0	1	2	3	4	5	6	1	2	3	4
45. Limitations and Benefits of the Distribution Methods: Knowing the true capabilities of each distribution method, or combination of methods, and tying these capabilities in with the needs of the organisation.	0	1	2	3	4	5	6	1	2	3	4
46. Effect of Distribution Method on Learners: Assessing how various distribution methods, or combination of methods, will cater to individual learning styles. Balancing learner needs against organisational needs.	0	1	2	3	4	5	6	1	2	3	4
47. Integration of Distribution Methods: Mixing distribution methods in an effective and efficient manner to facilitate learning.	0	1	2	3	4	5	6	1	2	3	4
48. Remote Site Co-ordination: Co-ordinating the installation and maintenance of distribution technology at a remote site and assuring that all systems continuously meet design specifications.	0	1	2	3	4	5	6	1	2	3	4
49. Technology Evaluation: Assuring that all component technologies continuously meet technical design and performance specifications.	0	1	2	3	4	5	6	1	2	3	4

	Current Level of Expertise							Future Importance			
Presentation Method Competencies	None	Basic		Intermediate		Advanced		How important is this competency for future success?			
50. Cost Analysis / ROI of the Presentation Methods: Understanding the relative costs of each presentation method, or combination of methods, and assuring that the organisation is receiving a good value for the money spent on learning technologies.	0	1	2	3	4	5	6	1	2	3	4
51. Limitations and Benefits of the Presentation Methods: Knowing the true capabilities of each presentation method, or combination of methods, and tying these capabilities in with the needs of the organisation.	0	1	2	3	4	5	6	1	2	3	4
52. Effect of Presentation Method on Learners: Assessing how various presentation methods, or combination of methods, will cater to individual learning styles. Balancing learner needs against organisational needs.	0	1	2	3	4	5	6	1	2	3	4
53. Integration of Presentation Methods: Mixing presentation methods in an effective and efficient manner to facilitate learning.	0	1	2	3	4	5	6	1	2	3	4

SECTION C: ETD LEARNING OUTCOMES

The purpose of this section is to determine the current level of expertise of ETD practitioners when compared against the draft Unit Standards for Occupationally – directed Education, Training and Development Practices as gazetted on 3 May 2000 (No. 21142). The outcomes are organised from basic to highly specialised standards within each ETD role.

Here are the steps you need to follow:

1. Column one indicates the ETD role
2. Column two specify the outcomes in hierarchical order from basic to advanced under each ETD role.
3. Read the various outcomes carefully, and if you perform the specific outcome, identify your level of expertise:

On a scale from 0 to 6, indicate how proficient you are in this specific outcome. Use the following definitions to help you identify the level of your expertise:

- **None(0):** Possess very little knowledge of, or experience in, achieving the specific outcome.
- **Basic (1-2):** Possess general understanding of key principles and has made some progress towards this specific outcome.
- **Intermediate (3-4):** Possess a comprehensive understanding of key principles and has made considerable progress towards achieving this specific outcome.
- **Advanced (5-6):** Possess substantial knowledge and expertise and is capable of achieving the outcome.

Use the higher number if you feel strongly that you have reached this level of expertise. Use the lower number if you are less confident that you have reached this level.

Example:

Role	Outcomes	Current Level of Expertise						
		None	Basic		Intermediate		Advanced	
Plan learning	• Coach learners	0	1	2	3	4	5	⑥
	• Plan learning events	0	1	2	③	4	5	6
	• Plan learning programmes	0	1	②	3	4	5	6
	• Plan a curriculum	①	1	2	3	4	5	6

General information

- Position of person completing the questionnaire: _____
- Organisation's name : _____
- Size of organisation: (tick appropriate block)

Small 1-49	Medium 50 – 199	Large 200 +
----------------------	---------------------------	-----------------------

ETD OUTCOMES IN THE TEXTILE INDUSTRY

Role	Outcomes	Current Level of Expertise						
		None	Basic		Interme- diate		Advanced	
Plan learning	• Coach learners	0	1	2	3	4	5	6
	• Plan learning events	0	1	2	3	4	5	6
	• Plan learning programmes	0	1	2	3	4	5	6
	• Plan a curriculum	0	1	2	3	4	5	6
Develop materials	• Prepare learning aids	0	1	2	3	4	5	6
	• Develop training materials	0	1	2	3	4	5	6
	• Co-ordinate design of training materials	0	1	2	3	4	5	6
Facilitate learning	• Facilitate targeted skills development	0	1	2	3	4	5	6
	• Facilitate learning through various methodologies	0	1	2	3	4	5	6
	• Facilitate learning through integrating methodologies.	0	1	2	3	4	5	6
Assess learning	• Conduct an assessment	0	1	2	3	4	5	6
	• Design integrated assessments	0	1	2	3	4	5	6
	• Moderate an assessment	0	1	2	3	4	5	6
	• Manage a quality assurance system	0	1	2	3	4	5	6
Guide and counsel	• Advise and refer learners	0	1	2	3	4	5	6
	• Guide and support learners	0	1	2	3	4	5	6
	• Guide and counsel learners	0	1	2	3	4	5	6
Manage learning	• Supervise a course	0	1	2	3	4	5	6
	• Supervise a skills programme	0	1	2	3	4	5	6
	• Manage a learnership	0	1	2	3	4	5	6
	• Manage a learning system	0	1	2	3	4	5	6
Evaluate learning	• Evaluate a course	0	1	2	3	4	5	6
	• Evaluate a learnership / programme	0	1	2	3	4	5	6
	• Evaluate learning systems	0	1	2	3	4	5	6
Conduct research	• Conduct elementary research in ETD / occupation	0	1	2	3	4	5	6
	• Design and conduct research	0	1	2	3	4	5	6
	• Design, conduct and co-ordinate research	0	1	2	3	4	5	6

ETD OUTCOMES IN THE TEXTILE INDUSTRY (continued)

Role	Outcomes	Current Level of Expertise						
		None	Basic		Interme- diate		Advanced	
Occupational development	• Identify recent changes / implications on own occupation and incorporate in position	0	1	2	3	4	5	6
	• Analyse recent changes / implications on ETD roles and incorporate in position	0	1	2	3	4	5	6
	• Analyse recent changes / implications on ETD practices and incorporate in position	0	1	2	3	4	5	6

CLOTHING, TEXTILES, FOOTWEAR AND LEATHER SETA

3rd Floor, Umdoni
28 Crompton Street
PINETOWN 3610

P O Box 935
PINETOWN

Tel: (031) 702 4482/83/84
Fax: (031) 702 4113

E-mail: titb@mweb.co.za

Extract of Minutes held on 7 August 2000 at the CTFL offices

The Working Group was elected at a meeting that took place on 8 June 2000 at the SETA Offices in Pinetown. Further meetings were held on 7 and 8 August 2000.

A Taylor	Sans Fibres	Training Manager
A Nilsen	CTFL SETA	Sector Skills facilitator
J Deepnarain	Eddels SA	HR Manager
L Smart	Natal Clothing Manufacturers' Ass.	
M Marais	SACTWU	SETA and Textile Chamber Member
A Wood	CTFL SETA	Chamber Manager:Footwear & Leather
E Besson	SA Clothing Ind	HR Director
A Ryklief	NULAW	Education Officer
P Kistan	CTFL SETA	Sector Skills Facilitator
M Buchenjohn	SACTWU	Clothing Chamber Member
M Machona	SACTWU	Regional Co-ordinator
F Barnard	Aranda Textiles	HR Director & CTFL SETA Chairperson
Q Baxter	Frame Textiles	HR Director
J Gilmour	Devtrain and Department of Labour	Facilitator
J Taylor	Assessment and Development Services (ADS)	
D Bowen	CTFL SETA	Chief Executive Officer
I Barnard	Student	Project Researcher

The Chairperson welcomed the task team to the meeting. The purpose of the meeting is to ratify the survey questionnaire which will be circulated to a sample of textile companies as part of a number of research projects currently being undertaken in the industry to compile the Sector Skills Plan. (extract of the Sector Skills Plan attached).

Ms Barnard gave an overview of the concepts of roles, competencies and outcomes which were included in the survey questionnaire and the rationale behind the research. Minor changes were made to the instruction sheets of the questionnaire. It was decided that the questionnaire to be circulated on Monday 16 August 2000 and that the Textile Chamber of the SETA would be responsible for the dissemination and retrieval of responses. The deadline date for the return of questionnaires was agreed to be 31 August 2000.

Extract of Sector Skills Plan meeting

- **The generation of new standards and qualifications**

New standard have been generated for Clothing, Textiles, Footwear and Leather as well as Mechanics across the above areas of learning (Annexure A details the lists of people serving on SGBs).

- **The receiving and analysing of Workplace Skills Plans**

Two hundred and eighty (280) Skills Development Facilitators have been registered to date and one hundred and fifty two (152) companies have submitted Workplace Skills Plans. A number of Sector workshops have taken place to deal with the workplace skills planning process (Annexure B details the companies who have submitted workplace skills plans and the companies that registered Skills Development Facilitators).

- **The compilation of four Master Workplace Skills Plans**

Workshops were run to compile Master Workplace Skills Plans for small and medium sized companies (Annexure C details the people who participated in this process).

- **Workshops**

Sessions were held with small manufacturers in Cape Town and Human Resources Groups representing Textiles and Clothing to identify skills and related needs (Annexure D details the people who participated in the process).

- **Research conducted by Sector Consultants**

A number of projects were conducted including the following:

- Assessment and Development Services conducted research on various sections of the guidelines (Annexure E contains a questionnaire that was used and a summary of the report).
- Izél Barnard, student at the Potchefstroom University for C.H.E., conducted research on the roles of in-company trainers and their levels of competence (Annexure F contains a questionnaire that is being used to compile a plan to develop the skills of the ETD-practitioners).

- **Sector Skills Planning Workshops with the “Captains of the Sector”**

Workshops were conducted with people regarded as the “10 wise people” (Annexure G details the people involved in this process)

Summary of learning technology terminology

Term	Description	Source
Browser	A client programme used to surf the web, like netscape or explorer.	Ravet and Layte (1997)
Compact disc read only memory (CD-Rom)	A format and system for recording, storing and retrieving electronic information on a compact disc that is read using an optical drive.	Bassi and Van Buren (1999)
Computer assisted instruction (CAI)	The use of a computer to deliver instruction. The modes of CAI are drill and practice, modelling, tutorial and simulation	Reynolds and Iwinski (1996)
Computer-based training (CBT)	A generic term for a computer programme used by a learner to acquire knowledge or develop new skills.	Ravet and Layte (1997)
Computer-managed learning (CML)	A computer programme that directs and tests learners' performance through their learning and produces various reports	Ravet and Layte (1997)
Digital video interactive (DVI)	DVI is a compact disc format designed for interactive multimedia	Reynolds and Iwinski (1996)
Electronic performance support system (EPSS)	EPSS is a well-constructed computerised tool, systematically integrated at the employee location, which exploits the diverse capabilities of a computer to improve individual and organisational performance. This means that the employee gets advice from the computer when a particular problem occurs.	Barras-Baker and Steyn (1998)
Extranet	A collaborative network that uses internet technology to link organisations with their suppliers, customers or other organisations that share common goals or information	Bassi and Van Buren (1999)
Hypermedia	A programme that links different media under learner control in a way similar to hypertext linkage or text. Hypermedia links media such as text, praphics, video, voice and animation. For example, the learner can choose video, see a related video sequence, and then return to the programme.	Reynolds and Iwinski (1996)

Term	Description	Source
Hypertext	A computer programme that links non-linear text. Hypertext allows flexible, learner-directed browsing to seek additional information by moving between related documents along thematic lines, without losing the content of the original inquiry.	Reynolds and Iwinski (1996)
Hypertext mark-up language (HTML)	The standard for web documents supported by internet browsers.	Ravet and Layte (1997)
Integrated services digital network (ISDN)	A telecommunication service with a band with large than current telephone lines.	Ravet and Layte (1997)
Interactive distance learning (IDL)	IDL is an interactive training process in which the instructor and learners are separated by time and/or space	Schabel (1998)
Interactive	This is when a computer responds in real time to a user's demand. True interactivity happens when people interact. Computers can be a support for interactivity when connected through a network like the internet.	Ravet and Layte (1997)
Internet	A loose confederation of computer networks around the world connected through several primary networks.	Bassi and Van Buren (1999)
Intranet	The use of internet technology within a group or an organisation	Ravet and Layte (1997)
Local area network (LAN)	A network of computers in a restricted area line a building	Ravet and Layte (1997)
Menu-driven	The types of authorising or learning systems in which actions or topics are selected by the learner from a list of choices.	Reynolds and Iwinski (1996)
Modem	A device placed at each end of a communication line to transfer data between computers	Ravet and Layte (1997)
Simulation	A computer model used by the learner to acquire new skills	Ravet and Layte (1997)
Staging	Collecting all the relevant data while a subject matter expert is performing the tasks; video, documentation and job aids	Ravet and Layte (1997)

Term	Description	Source
Subjective probability measurement (SPM)	An assessment technique where learners rate their confidence when they respond to a test.	Ravet and Layte (1997)
Technology-based learning (TBL)	TBL is the umbrella term that includes all forms of computers in support of learning	Reynolds and Iwinski (1996)
Uniform resource locator (URL)	The internet address of a document	Ravet and Layte (1997)
User-friendly	The desirable attribute of a computer system in which the user does not have to be an expert or use the system and that mistakes are easily overcome or avoided by the system.	Reynolds and Iwinski (1996)
Virtual reality (VR)	VR is a computer-based technology that gives learners a three-dimensional, interactive or simulated experience. VR is used to simulate conditions that do not actually exist, but may also be used to simulate actual potential conditions.	Gunther-Mohr (1998)
Worldwide web	A distributed information service based on the metaphor of hypertext to structure the access to the internet.	Ravet and Layte (1997)

PRESENTATION METHODS FOR DISTRIBUTION METHODS MATRIX

Presentation Methods	Distribution Methods											
	Satellite TV	Cable TV	LAN / WAN	Web Internet Intranet Extranet	CD-ROM / DVD	E-Mail	Voice Mail	Tactile Gear / Simulator	Audio tape	Video tape	Telephone	Computer Disk
Audio			X	X	X		X		X		X	X
CBT			X	X	X							X
Electronic Text			X	X	X	X						X
EPSS			X	X	X							X
Groupware			X	X								X
Interactive TV	X	X										
Multimedia			X	X	X			X				X
Online Help			X	X	X							X
Teleconferencing	X	X	X	X							X	
Video	X	X	X	X	X					X		X
VR/#D Modeling					X			X				

**DEVELOPMENT NEEDS FOR ETD FACILITATORS AS IDENTIFIED IN
THE EMPIRICAL STUDY**

Current Level of Expertise			Future Importance		
Period: 2001					
48.	Remote site co-ordination	2,08	48.	Remote site co-ordination	2,82
49.	Technology evaluation	2,86	49.	Technology evaluation	3,27
45.	Limitations and benefits of distribution methods	2,98	45.	Limitations and benefits of distribution methods	3,19
44.	Cost analysis / ROI of the distribution methods	3,00	44.	Cost analysis / ROI of the distribution methods	3,41
21.	Cost benefit analysis skills	3,03	21.	Cost benefit analysis skills	3,00
50.	Cost analysis / ROI of the presentation methods	3,13	50.	Cost analysis / ROI of the presentation methods	3,25
27.	Futuring skills	3,25	27.	Futuring skills	3,34
46.	Effect of distribution methods on learners	3,31	46.	Effect of distribution methods on learners	3,19
23.	Data reduction skills	3,33	23.	Data reduction skills	3,02
12.	Contracting	3,36	12.	Contracting	2,98
13.	Project management	3,43	13.	Project management	3,38
51.	Limitations and benefits of presentation methods	3,43	51.	Limitations and benefits of presentation methods	3,22
47.	Integration of distribution methods	3,48	47.	Integration of distribution methods	3,25
33.	Organisation behaviour understanding	3,49	33.	Organisation behaviour understanding	3,31

Period: 2002			
36. Personnel / HR field understanding.	3,53	36. Personnel / HR field understanding.	3,38
7. Buy / in advocacy	3,54	7. Buy / in advocacy	3,30
31. Model building skills	3,55	31. Model building skills	3,29
20. Computer competence	3,60	20. Computer competence	3,45
35. Performance observation skills	3,75	35. Performance observation skills	3,34
34. Organisation understanding	3,78	34. Organisation understanding	3,31
52. Effect of presentation methods on learners	3,78	52. Effect of presentation methods on learners	3,40
2. Instructional design	3,81	2. Instructional design	3,67
18. Career development knowledge	3,84	18. Career development knowledge	3,29
			3,41
53. Integration of presentation methods	3,86	53. Integration of Presentation methods	3,74
3. Performance gap analysis	3,88	3. Performance gap analysis	3,49
9. Consulting	3,88	9. Consulting	3,46
28. Group process skills	3,89	28. Group process skills	3,27
25. Facilities skills	3,92	25. Facilities skills	3,46
32. Objectives preparation skills	3,94	32. Objectives preparation skills	3,62
10. Business knowledge	3,98	10. Business knowledge	3,17
30. Library skills	3,98	30. Library skills	

Period: 2003 – 2004			
40. Research skills	4,00	40. Research skills	3,38
4. Change management	4,00	4. Change management	3,67
17. Audio / visual skills	4,03	17. Audio / visual skills	3,18
11. Systems thinking	4,03	11. Systems thinking	3,51
6. Industry awareness	4,12	6. Industry awareness	3,83
15. Programme evaluation	4,17	15. Programme evaluation	3,67
1. Adult learning	4,17	1. Adult learning	3,70
29. Intellectual versatility	4,22	29. Intellectual versatility	3,45
16. Learning technology methods	4,23	16. Learning technology methods	3,50
22. Counselling skills	4,28	22. Counselling skills	3,42
24. Delegation skills	4,29	24. Delegation skills	3,33
39. Record management skills	4,31	39. Record management skills	3,44
43. Writing skills	4,31	43. Writing skills	3,55
42. Training and development techniques understanding	4,33	42. Training and development techniques understanding	3,63
41. Training and development field understanding	4,43	41. Training and development field understanding	3,55
19. Competency identification skills	4,43	19. Competency identification Skills	3,71
26. Feedback skills	4,44	26. Feedback skills	3,58
38. Questioning skills	4,52	38. Questioning skills	3,40
5. Leadership	4,58	5. Leadership	3,77
8. Interpersonal relationship building colaboration	4,61	8. Interpersonal relationship building colaboration	3,70
14. Communication	4,76	14. Communication	3,76
37. Presentation skills	4,85	37. Presentation skills	3,62