THE IMPACT OF TRAINING AND DEVELOPMENT ON PRODUCTION AT PORTO IN RICHARDS-BAY

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Dedicated to my late parents:
Mr Oswald Mkhuluri Moyo and Mrs Alice Judith NyaNkhwazi Moyo

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Abstract

The main aim of this study is to find out if training and development of labour has any

impact in facilitating a positive effect towards the production process in any organisation.

The results of this study therefore intends to shed some light in how training and

development should be conducted as well as how the different types of training

programmes could be improved. In the same effort the study also intends to sensitize

PORTO's employees on how the industry benefits from effective training programmes,

and how this affects the surrounding communities.

The study further intends to evaluate the effectiveness of training different types of

employees at different levels of production using various training methods. The study

identifies effective training programmes and methods, and then make recommendations

on how they could be improved.

The study also identifies some of PORTO's shortcomings as far as training and

development issues are concerned including the absence of evaluation tools of training

programmes. In that light, the study proposes that the organisation designs such tools or

instruments which could evaluate individual's improvement in performance through

these training programmes. Pre and post testing, the use of the suggested questionnaires,

as well as the use of score sheets are suggested as instruments or tools that could be used
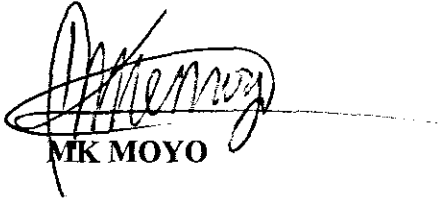
to evaluate employee's performance and subsequently the impact of training interventions on production.

The findings interestingly also indicate the relationship between training development and skills level. The argument is that training and development improves the skill level which also improves performance. Therefore, to increase production, efforts should be made to improve the skill levels of employees across the board. The researcher also hopes that an improvement in these areas, would consequently improve the economic situation of the industry and the welfare of the surrounding communities. The study further looks at the other factors that improve performance.

The study then gives out suggestions and recommendations on how to run effective training and development programmes. It also gives out solutions to some of the problems that were identified along with suggestions for further research related to this area of study.

DECLARATION

I declare that this work is my original work and that all sources used were acknowledged by means of references.

MK MOYO

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ORIENTATION TO THE STUDY

1.1 Introduction

The low productivity levels of South African human resources, raises a high concern for its development and improvement. The need for training and development of employees in any organisation at all levels can therefore not be overemphasized. The study focuses on research on training and development, which was carried out in one of the major industries in the Richards Bay Harbour area, here in referred to as 'PORTO'. The industry contributes substantially to the country's Gross Domestic Product. The study seeks to find out whether training and development interventions have any impact in facilitating work performance of employees of this industry, which eventually can be seen in the employee's productivity.

Firstly the study discusses the effect of training all types of labour , from manual labour, which is semi-skilled and unskilled labour (which has a direct economic impact on the production of the industry) as well as the training of middle and top management (which has an indirect impact on production). The impact of training on performance has been analysed for the sampled trainee's and trainer's to determine the impact the intervention has on the industry's production processes.

Lastly, the study, amongst other things, gives an analysis of various training methods, compares the effectiveness of these methods on production as well as looks into other challenging issues the country and the industry faces as far as training is concerned.

1.2   Background to the problem

South Africa is regarded as a developing country and has one of the lowest productivity figures in the world. This creates serious problems for human resources managers and organisations to maintain profitability. Gerber, Nel and van Dyk (2001) raise out a concern that the utilisation of capital in South Africa is increasing twice as rapidly as the utilisation of labour. This has also led to a decrease in the productivity of human labour per unit as well as unemployment. At the same time the low labour productivity level can also be attributed to a shortage of skilled labour that the nation is experiencing. Amongst other reasons the shortage can be attributed firstly to emigration of White labour and secondly to the slow pace at which non-White labour will be able to replace the emigree labour in the immediate future. According to Gerber et al (2001), by the year 2000 South Africa was functioning with only 9% of its economically active population being highly skilled, while most industrialized countries had 33% of their population being highly skilled. Where managerial staff was concerned, the figure for South Africa was 2% as against 7% for industrialized developed countries.   It is, therefore, important for organisations to carry out effective training programmes for employees and skill-upgrade programmes for managers to ensure *that* organisations achieve the required level of competence.

Many authors would agree that often the success of an organisation depends on the quality and behaviour of its people. The distinguishing factor of an enterprise is irrefutably the ability of its human resources, which has to be properly and adequately managed. This is supported by Charteejee's (1999) perception. He contends that the betterment of people is the central resource in any organisation and in any society, and that, therefore, organisations should encourage initiatives that are directed at the growth and betterment of employees towards higher levels of *capability, productivity* and *satisfaction.*

In South Africa, human resource managers are faced with great challenges, because the employment situation is unique. On one hand, there is a serious shortage of skilled employees, while there is also a high rate of unemployment among skilled labour. South Africa is thus faced with an enormous challenge of increasing the productivity of lower level workers if the rate of unemployment is to be reduced. An increase in productivity leads to economic growth, which will help create employment. With the shortage of highly skilled managers and employees in this country, it is also essential that all training and development possibilities be fully utilized.

Law and Edwards (1995) have the opinion that the more the human resources are used effectively, the more productive organisations could be, which would have a beneficial effect on the economy of the country as a whole. The country with the most efficient management of its human resources will always be economically better off.

The task of providing training, whether career-oriented or not, cannot be carried out by the formal education system alone, as it is simply not possible in practical terms to deal with such vast numbers. Enterprises therefore have a responsibility to contribute towards the effective training of their employees, and in so doing, to counter the national illiteracy problem. Erasmus and van Dyk (1996) point out that a major challenge faced by enterprises in South Africa is to have effective training and skills up-grade programmes to ensure that employees have the necessary knowledge, skills and attitudes to do their work successfully.

The situation in the industry under study, PORTO, is that there is a training center with various training programmes being utilized. The effectiveness of these programmes is still to be investigated. The main problem is that the industry does not have assessment (evaluation) measures for these programmes. Evaluation of these training programmes in terms of their effectiveness would indicate whether training of employees does increase their performance and overall production of the industry and whether the training methods or programmes used are effective.

1.3 The statement of the problem

From the researcher's point of view, and from observation, low productivity levels of South African human resources in industries indicate a high need and concern for their development and improvement. The problem statement in this research is: *'Does training and development of labour have any impact in facilitating a positive effect towards the production process at PORTO?'*

1.4 Objectives of the study

This study has three objectives. The main objective as mentioned earlier is to find out if at all training and development is perceived to have positive consequences in the industry concerned.

The second objective of the research is to evaluate the effectiveness of training different types of employees at different levels of production using various training methods.

The third objective of this study is to help the industry evaluate their training programmes by designing questionnaires, which will determine whether any type of training is worthwhile.

With these results, the industry would be in a position to assess and inform employees on the training programmes and at what levels they should recommend particular training programmes. If this is well planned and envisaged, it is hoped that the findings would assist the industry in improving its economic situation. The results would also help the researcher make suggestions as to how training and development programmes could be improved as well understand how training would benefit the industry and the surrounding communities.

1.5 Motivation for the study

The researcher was motivated to choose this topic because of the interest he has for Development and Labour Economics. As mentioned earlier, South Africa, which is regarded as a developing country, has one of the lowest labour productivity figures in the world mostly because of the shortage of skilled labour, which raised further interest in doing the research. The subject becomes increasingly relevant to the researcher when a town like Richards-Bay is analysed. The town itself is said to be the country's fastest growing town because of its industries. This means, the industries in themselves to a large extent, contribute to the GDP of the country. It also becomes evident; therefore, that it is essential to increase or maintain these industries' productivity levels for the country to compete globally. As to how much Richards-Bay industries contribute to the country's GDP still remains to be investigated and falls out of the scope of this research. A focus of this research on a smaller scale, is to find out how much growth of the industry in terms of their human resource benefit the welfare of the surrounding communities at large.

PORTO was then chosen over the other industries in Richards-Bay because it is known to have extensive training programmes. Another interesting observation made was that most of these programmes do not have any evaluation criteria or tools to monitor their effectiveness.

1.6 Significance of the study

The significance of this study will be seen in the way the findings are able to shed some light on the importance of the existing training programmes in the industry. The focus of the study is the economic and social impact that training has on production and how much the industry contributes to the surrounding communities. The other significant area is the way the results highlight the effectiveness of various training methods at different working levels. The findings, therefore, will be clearly instrumental in suggesting more effective methods of training and identifying problems and issues that will help improve the growth of the industry, which in the long run will have an impact upon the welfare of the surrounding communities. The research should recommend solutions to the identified problems and highlight the areas that need attention

1.7 Research methods

The research used various methods and instruments in collecting data, as explained briefly below. Chapter Four then comprehensively explains how these methods and instruments were used as well as the reasons.

1.7.1. Population and Sample

The target population in this project was employees of PORTO. The method used to select the sample was simple *random probability sampling,* whereby every subject has an equal chance of being selected as part of the sample. This research involved 45 trainees, with 4 trainees being evaluated from each one of the 9 training interventions that exist in

the industry namely: ABET (Adult and Basic Education Training), Management and Supervisory training, Learnership training, Technical training, In-service training, Marine training, First Aid and Safety training, Induction training, as well as Bursary scheme employees' training. In addition to this 9 trainers were evaluated one from each program. The research also used one questionnaire to get information from the Training Manager with regard to the industry's training programmes and past statistics of the trained employees. 46 people in total responded. An equal number of employees from each of the above listed interventions were equally represented in the sample when interviews were being conducted so as to get a general picture of opinions on training issues in the industry. This method was used to compare results within different categories or levels.

1.7.2 Instruments and procedure of collecting data

The researcher used the following instruments, and procedures in collecting data:

(i) Data collecting methods

The survey method as explained in Chapter Four was used in this research. Thus, face-to-face structured interviews were conducted in finding out about people's opinions, problems, attitudes, influences and personal views of the employees and employers on the topic under study. Where it was not possible telephonic interviews were done by the researcher.

A structured questionnaire was used to determine the frequency of certain answers and to find out the relationships that exist between different variables.

The other technique which was used include data from secondary sources which largely comprised of the industry's financial records, output records, inputs, books, brochures, journals, reports and other related publications.

(ii) Analysis of data collected

The data collected was both quantitative and qualitative and was recorded in tables, figures, charts, and graphs where necessary. Quantitative data consisted of biographical variables and frequencies of responses. On the other hand *qualitative* data was largely data, which comprised of opinions, problems and other views of the targeted population regarding the topic.

Through analysis of the figures, one will be able to see the real effect or impact of training as well the methods on the production process. Different views that were expressed helped in identifying problems or issues relating to the training process.

1.8 Itemisation of chapters

Apart from this introductory Chapter, the study proposes the following itemization of chapters:

Chapter Two sets the tone by presenting the theoretical framework on training, development and production. Firstly, the chapter presents the concept of training, education and development to ensure clarification of these terms. Secondly, the chapter attempts to discuss the purpose of training in general, thus, the reasons why organisations send their employees for training. The chapter further presents a three-step training and development systems model as presented by Dessler, an American Industrial Psychologist in an attempt to illustrate the training and development process. The *needs analysis* is the first step in Dessler's model of the training. Dessler (1999) stipulates that organisations should first of all establish the need of sending their employees for training. He further explains that needs analysis involves the identification of job performance skills needed to improve performance and productivity. It also involves analyzing the target populations (trainee audience) so as to ensure that the training programmes are designed to suit the people intended in terms of the level of education, experience, skills, attitudes and personal motivation.

The second step that is discussed in this chapter is *designing the training programmes, or instructions and implementation of the programmes*. The step involves gathering instructional objectives, methods, descriptions, examples, exercises and activities involved and this should be organised in a way that it also supports adult learning and provide a blueprint for programme development. The step also identifies various kinds of learning materials that can be used in training. This step also explains promptly the most commonly used training methods, their advantages as well as their disadvantages. The

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step further discusses the factors that affect or determine which training and development methods should be used and the cost implications of these methods.

The last step is the *evaluation or analysis of the impact of training*. This step looks into the assessment of the programme. This step looks into the assessment of the training programmes in terms of their effectiveness and efficiency. The step also discusses, how to measure training programmes, the purpose of evaluation, the instruments to use as well as the cost-benefit ratio of training and development as described by Moorby (1996). Lastly the step also looks at the significance of evaluating training and development programmes before implementing them. The chapter also proposes that programmes should be piloted on a representative audience to ensure programme effectiveness. The step also encourages train the trainer workshops to ensure that trainers are competent, thus, have the necessary knowledge and skills to carry out the programmes.

Chapter Three discusses the theory of training and development as it applies to the South African context. Firstly the chapter reviews the status of the South African labour market with regard to training and skills development. The state or the performance of the South African labour market in recent years is discussed and compared with other countries. The purpose of this is to provide an understanding of how competitive South African human resources are at the moment. This part of the chapter also gives an idea of how much training and skills development is required in terms of numbers as given in various tables and statistics. An emphasis in this chapter is also placed on the current labour market trends in South Africa. Thus, issues like the demand for skilled labour in

the new South Africa, aspects that affect the human resources as well as the country's human resources problems that also normally hinder economic growth or productivity.

Another aspect that the chapter also looks into is a discussion that centers on the South African development initiatives as well as factors that affect training and development. These factors promote effective training and development and an understanding of such factors help establish solutions or ways of improving the current situation with regard to training and skills development.

Lastly, the chapter also looks at the South African training legislation, government and financial policies as well as other related legislation that influence training and development processes.

Chapter Four, unlike the other three chapters, discusses the research methodology. This includes a discussion on the target population or the sample, instruments and procedures that were used in the research as well as the choice of the organisation understudy. The chapter also explains the type of data collected as well as how the research succeeded in teasing out the information.

Chapter Five presents the actual findings or data from the research exercise in form of tables, charts and other means of recorded data collected from questionnaires and other sources. The chapter further analyses the data presented so that it gives meaning.

Lastly, **Chapter Six** deals with the discussion of the results, recommendations or suggestions of the researcher with regard to the findings or results. A conclusion based on these findings is made on whether training improves productivity and whether it contributes to the welfare of the surrounding communities. A discussion is also made of issues that are found in the research including the researchers' opinions on the whole study. Finally, the chapter also deals with the shortcomings of the research as well as other recommended areas for research.

Chapter Two

LITERATURE REVIEW ON TRAINING, DEVELOPMENT AND

PRODUCTION

2.1 Introduction

Skills development through education and training has always been the most powerful level for improving both individual opportunity and the institutional competitiveness of communities worldwide (Meyer, 2002). Governments and employers recognise the initial role a skilled and knowledgeable workforce can play in securing competitive advantage in international markets. Many enterprises would agree that often the quality of their human resources will be the determining factor in their continuing progress and prosperity.

Organisations, therefore, also have a responsibility to contribute towards the effective training of their employees and in so doing, to counter the national illiteracy problem.

At first this chapter discusses the concepts of training, education, development and production to ensure clarification of the terms used in the rest of this study. It continues to indicate the purposes of training and development.

Secondly, the chapter discusses training and development model that was developed by Dessler, an American Industrial Psychologist to illustrate a logical and systematic process that organizations should at least follow for their training programmes to be successful. The model has three steps namely: needs analysis, designing the training programmes or instructions and implementation as well as the evaluation of training programmes, which involve analysing the impact of training. The model further looks at many aspects with regard to training, such as the types of training programmes, factors that affect course development (that determine which training methods should be used), the cost benefit ratio of training and development as well as the purpose of training just to mention but a few.

2.2 Clarification of concepts

There are certain terms that are commonly used in the training and development context, which are also used interchangeably. Below are some definitions of such terms, so that a common understanding is reached or made when these terms are used in this research.

2.2.1 The concept of training

Erasmus and van Dyk (1996) define training as a systematic and planned process aimed at changing the knowledge, skills and behaviour of employees in such a way that organisational objectives are also achieved. From the definition, emphasis of some form of order is described, the terms 'system' and 'planned process' suggest that, for any training to be effective, there should be some order in carrying out certain things in this

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context it means the orderly way of changing the skills, knowledge skills and behaviour of unskilled employees in order to achieve organisational objectives.

On the other hand, Goldstein (1991) refers to the training process as a systematic acquisition of attitudes, concepts, knowledge, roles or skills that result in improved performance at work. Goldstein's definition is very similar to the latter one in a sense that both definitions emphasize some form of order or systematic way that has to be followed so as to improve performance. The second definition suggests that training is task-orientated because it focuses on the 'work' performed in an enterprise and is directed at improving employees' job performance in an enterprise. It can, therefore, be deduced from these two definitions that training is usually presented when current work standards are not being maintained, and the situation can be ascribed to a lack of knowledge, skills and or attitudes among individual employees or groups in an enterprise. In addition, training is also presented as a result of technological innovation which may require employees to go for special training to use the new innovations introduced. Another similar term used in training is *education,* which has a different meaning to training altogether and is defined below.

2.2.2 The concept of education

Education refers to activities directed at developing knowledge, skills, moral values and understanding. The approach (education), therefore, focuses on a wider range of activities than on providing knowledge and skills for a limited field or activity. According to Go'mez-mejia, Balkin and Cardy (1995) view education as essentially

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being aimed at creating circumstances and opportunities for young people and adults to develop an understanding of the traditions and ideas of the society in which they live, while enabling them to contribute to their society. Education, therefore refers to a process of deliberately influencing and shaping the behaviour of children as well as adults. It also refers to basic knowledge rather than applied skills and has less or no immediate application to a specific job.

Erasmus et al (1996) define *education* by comparing this concept to the training concept. They articulate that *education* is a broader concept compared to training, in a sense that training is said to take place within an organisation, especially with regard to skilled and unskilled workers. They further point out that normally skilled workers such as managerial staff do not receive training in the usual sense of the word, but rather are exposed to management development programmes intended to prepare them for higher positions. Training then makes employees aware of a wide range of subjects that may affect the success of the enterprise. On the other hand, unskilled workers receive education in the form of Adult Basic Education (ABET) with the view of enhancing their basic literacy and numeracy skills. Both education and training are, therefore, brought about by creating circumstances under which an employee can acquire the required skills, knowledge and attitudes to the extent that they are prescribed by the stated objectives. The main result should be the application of the knowledge required in the workplace. van Dyk, Nel, Leodoff and Haasbroek (1997) summarise the two definitions by remarking that education creates a general basis that prepares an individual for life, while

training guides an individual and prepares him or her to perform specific activities as dictated by the job.

2.2.3 The concept of development

When Gerber et al (1996) define development; they refer to employee development in and organisation rather than the development of an individual in general. They point out that employee development is directed mainly at creating learning opportunities and making learning possible within an enterprise. Development normally takes place within the context of specific organisational objectives. It is directed at making use of planned productive learning methods. An example of development could be whereby and organisation designs a training programme such as advanced computer course due to the need for such an intervention. On the other hand, management development programmes are usually directed at providing managers or potential managers with the knowledge, skills and attitudes necessary to manage the organisations.

2.3 Purpose of training and development in an organisation

There are several reasons why employees are sent for training in organisations. Listed below are some of the common reasons why South African organisations send their employees for training:

a. *Improve performance*

After skills gaps or performance gaps are identified normally through a skills gap audit, employees are then sent for training so as to improve and equip them with the necessary skills to perform their duties (Stammers and Patrick, 1995). Employees who have been newly promoted like managers may not have the necessary skills and abilities required for the new post. This would then call for such an employee to be sent to a relevant training course so that he or she could improve his or her performance on the new job. In most cases, such employees may have been promoted without some required skills. They may be promoted on the basis that they have the potential to acquire the new skill through training.

b. *Update employees' skills*

Moorby (1991) points out that practice has shown that training could also be required for employees who require to be upgraded in terms of skill due to an introduction of new technology or machines. An installation of new software programmes would necessitate employees to go for a relevant computer-training course for them to use such software.

c. *Avoiding employees obsolescence*

According to Human (1991) the other reason why employees would be sent for a training course is to avoid a situation whereby employees or managers become out-dated with new issues, methods or policies. With the changing world, the jobs also change in a way that organisations are obliged to change some of their methods and policies in line with national directives so as to remain competitive on a global scale and within the legal

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frameworks. The introduction of new legislation or policies such as Employment Equity Act would therefore call for managers to be trained in the provisions that are laid down in that act so that they meet all the requirements and do not get fined or penalised for contravening some of the provisions in that act.

d.   Solve organisational problems

Cornelius (1991) stipulates that certain training programmes could help employees solve certain problems in organisations. For example, an organisation with Labour Relations practitioners could send its employees for relevant training courses that would help them resolve labour disputes and grievances within that organisation.

f. Orient new employees

Mobey and Graeme (1995) contend that new employees might need to be sent for orientation training programmes whereby they would attain some information with regard to the realities and assumptions they have of that organisation. This helps in reducing any uncertainties about the job and find out how to fit in socially. Employees may be sent for an orientation programme, which includes what to expect, what they are entitled to, and who to report to, etc.

g. Prepare for promotion and managerial succession

Career development programmes could help attract, retain and motivate personnel. Such training could enable an employee to acquire the skills needed for promotion, and this might also ease the transition from employees present job to the next one, which

normally involve greater responsibility (Moorby, 1996). Organisations would send potential supervisors for supervisory courses so that when they are promoted to the higher ranks they easily fit in their new jobs.

h.   *Satisfy personal growth needs*

Munchinsky, Kriek and Schreuder (1991) argue that most employees feel empowered after undergoing any training programme. They also feel very motivated and confident to execute some duties they are required to perform than before they went for the training. They also feel they can face challenges on the job with the new acquired skills. Training could, therefore, provide activities that can result in both greater organisational effectiveness and increased personal growth for all employees. Employees who have been exposed to, say middle-management courses, would have grown more knowledgeable, skilled and ready to take on a middle-management post.

2.4 Training and development systems model

Training and development can only take place effectively if it is executed within the context of a logical and systematic process. Training should, therefore, be a specifically planned organisational programme in accordance with the organisational needs and objectives as well as training needs of the employees. Thus, while the programme would be designed to meet the goals of the organisation, the employees subjected to it should also be granted with an opportunity to grow and develop.

It is, therefore, essential that organisations design effective training and development models. Below is an example of such a model designed by an American Industrial Psychologist Professor, Dessler. Dessler's (2000) model views the training programme process in holistic terms, having three-steps as outlined in Figure 2.4.1 below:

FIGURE 2.4.1 Dessler's training and development systems model (Dessler, 2000:p.339).

STEP ONE: NEEDS ANALYSIS

- Identifying specific job performance skills needed (skills gap) to improve performance and productivity
- Analysing the target or trainee audience to ensure that the program will be suited to their specific levels of education, experience, and skills, as well as their attitudes and personal motivations.
- Use research to develop specific measurable knowledge and performance objectives.

STEP TWO: DESIGNING THE TRAINING PROGRAMMES OR INSTRUCTIONS, AND IMPLEMENTATION OF THE PROGRAMMES

- Gather instructional objectives, methods, media, description of and sequence of content, examples, exercises and activities. Organise them into a curriculum that supports adult learning theory and provides a blueprint for program development.
- Make sure all materials, such as video scripts, leaders' guides and participants' workbooks, complement each other, are written clearly, and blend into unified training geared directly to the stated learning objectives.
- Carefully and professionally handle all program elements—whether reproduced on paper, film, or tape—to guarantee quality and effectiveness.
- Introduce and validate the training before a representative audience. Base final revisions on pilot results to ensure program effectiveness.
- When applicable, boost success with a train-the-trainer workshop that focuses on presentation knowledge and skills in addition to training content.

STEP THREE: EVALUATION AND FOLLOW-UP

Assess program success according to:
- ✓ **REACTION** - **Document** learners' immediate reactions
- ✓ **LEARNING** - **Use** feedback devices or pre- and post-tests to measure what has been learnt
- ✓ **BEHAVIOUR** - **Note** supervisor's reactions to learner's performance at completion of the training.
  - This is one way to measure the degree to which learners apply new skill and knowledge to their jobs.
- ✓ **RESULTS** - **Determine** the level of improvement in job performance and assess needed maintenance

2.4.1 Step one: training needs analysis/assessment

Training needs analysis or assessment is the determination of the gap between what employees "must do' and what they "actually can do." This deals with identifying the gap between current and expected results as well as implying a performance deviation. There should be a prescribed standard with which the employee should conform, and if an employee fails to do so, a deviation should exist. The setting of attainable standards must be known and should be a prerequisite for determining training needs.

2.4.1.1 Three-step process of assessing training needs

According to Goldstein (1991) assessing training needs consists of a classic three-step process that encompasses organisational analysis, task analysis and personal analysis.

Firstly, *organisational analysis* focuses on factors that provide information where and when training could be used in the organisation. Goldstein (1991) observed that persons who participate in training are faced with a problem. They are required to learn something in one environment-the training situation-and to use it in another-on the job. Training programmes can, therefore, fail because of organisational constants that they were not intended to address. For example, employees will find it difficult to overcome a situation in which they learn a set of behaviours that are inconsistent with the way a manager prefers to have the job performed.

Training is, therefore, more effective when management provides a supportive climate that encourages trainees to explore new ideas and use their knowledge. Stammers et al

(1995) contend that organisational analysis examines system-wide factors, which facilitate or retard the transfer of skills from training to the job. Whatever factors were present in training to facilitate development of new skills, these should also be present on the job to facilitate maintenance of those skills. It is important, therefore, to analyse any environmental or organisational problems or factors that could facilitate or hinder the training process before designing the program and implementing it.

Secondly, Goldstein (1991) stipulates that a *task analysis or operations analysis* should be done to determine the training objectives that would be related to the performance of particular activities or job operations. He further defines task analysis as a systematic analysis of the behaviour required to carry out a task with a view of identifying areas of difficulty, the appropriate training techniques as well as learning aids necessary for successful instruction. Thus, task analysis is seen as a process of collecting information necessary to reach decisions about what to train, (what an employee must do in order to perform competently) who to train and how much to spend on training.

Lastly *personal analysis* is the last step in assessing training needs, and seeks to answer questions like: who in the organisation needs training? And what kind of training do they need? Most of the assessment questions used here are based on the use of performance appraisal systems because it is necessary to appraise employees in order to determine their training needs. According to Goldstein (1991), personal analysis is mainly predicated upon diagnostic propositions of performance appraisal, and is used as a basis of providing learning experiences that are helpful to the employee. Personal analysis also

includes self-evaluations of individuals in their ability. This helps organisations to identify individual training needs.

2.4.1.2   Situations leading to training needs

After assessing the nature of training needs, it is vital that organisations identify the origin of the training needs. Below are some of the situations identified by Erasmus (1996) that may lead to organisations needing to train its employees.

Firstly, performance problems may arise when employees know what is required of them but do not perform as desired. A need, therefore, may arise for training to help such employees perform. Erasmus and van Dyk (1996) points out that potential performance problem areas could arise from low morale and unusual complaints because of lack of motivation which eventually leads to employees not performing at their best. Another performance problem that Erasmus and van Dyk (1996) thinks is important is that of high labour turnover and high level of absenteeism from work due to low motivation leading to a drop in performance level. Yet another sign of performance problem could be seen from a high level of accidents emanating from the poor design of some of the machines or age of the machines. Low overall productivity figures could also be a sign of poor performance seen through the decrease in productivity figures per employee. All the above problems could be identified and a need for further training of employees would remain a top priority of the organisation for the improvement of production.

Secondly, purchase of new equipment and introduction of new systems or procedures to adapt to new product manufacturing methods often would require training of employees to use such equipment of systems. The pressure of organisations to remain competitive and to produce better products than their counterparts sometimes necessitates new procedures and systems for which employees must be trained anew (Humphrey and Halse 1991). New technology innovations as explained above will need employees to be sent for training so that they are able to use the new equipment or the new methods brought in by these new innovations. New innovations, therefore, will be said to have identified a need for training in that organisation.

Thirdly, in many cases training is presented out of habit (habitual/automatic training) or for the sake of appearances. Most organisations train for the sake of doing so or so that they could report to their relevant reporting bodies. Also training legislation enforces most institutions that are paying the skills levy to train so as to qualify for training funds. Enterprises should therefore, evaluate their existing training programmes (external and internal) carefully, to ensure that actual needs are addressed, and should also assess whether employee performance has improved as a result of training. Tepper (1994) argues that training is capital intensive by nature and the returns should be measured in terms of the contribution made to achieving the organisational objectives. If costs of training exceed the benefits then the programme should be re-designed before or be replaced by a cheaper one.

2.4.1.3 Levels of training needs and approaches

Needs are found at various levels and can be divided into three categories, namely macro level, mesolevel and microlevel.

a. Macro level needs

Macro level needs are those training needs that are caused by environmental factors such as political, social, economic and welfare conditions (Munchinsky et al, 1990). Normally these conditions have a considerable impact on the approach to training followed by an enterprise. For example, technological development, an economic factor, compels organisations to keep abreast of the latest technical methods to ensure profitability. A national problem in South Africa, such as illiteracy, a social and welfare factor, can be addressed by organisations sponsoring relevant training programs, or presenting such training programs to their employee. This increases the credibility of the enterprise, which is a political factor and also serves to confirm the enterprise's commitment to its social responsibility.

b. Mesolevel needs (at organisational level)

Cornelius, (1991) defines mesolevel-training needs' as needs that are assessed at organisational level. Thus, it focuses on the enterprise as a whole and looks at factors such as changing the organisational climate which can give rise to training needs. It is also important to take note of the organisational structure of the enterprise to determine whether there may be structural problems. Restructuring of an organisation or re-engineering of certain functions in the organisation may lead certain individuals being

placed under new components or functions which would in turn need them to be re-trained or re-skilled to perform in their new fields.

c. Microlevel needs

Brown and Harvey (2001) then define microlevel needs as training needs that evolve work content (operational level), individual performance and the personal dimension. These are needs that are work related:

Firstly, *operational level (work content)* emphasises the content of the incumbents work. When work content is investigated, effort is made to determine which competencies an employee must have to do his or her job. Attention is given to knowledge and skills that incumbent requires to do his or her job, thus, employees competencies are weighted against the duties and required competencies for that job the employee is doing. The gap

found would create an operational level need for that individual to be trained. Anthony, Pamela, Perrewe, and Kacman (1993) point out that additional duties or functions of a certain posts due to the engineering processes in the organisation may lead to an employee lacking certain competencies or skills to perform a particular job.

Secondly, *individual performance* is measured to determine in which areas employees are lacking in terms of knowledge skills or attitude. Charteejee (1999) contends that formal performance assessment, evaluation centres, psychological tests, the opinions of employees and stimulation exercises are methods used to measure individual

performance. In essence, each individual's performance is measured and recommendations are made as to whether that individual needs further training or not depending on the outcome of the results. Strengths and weaknesses of employees are assessed and linked to their performance levels and determine the specific areas in which those individuals need to be trained.

Lastly, *time dimensions* should be considered in conducting a needs assessment. Future and present changes or influences linked with time should be assessed. This also has to be looked at with the environmental changes that have already been mentioned (Middleton, Ziderman and Adams, 1993). As mentioned above with time and environment changes, a need could arise for further training, economic or political changes are the most common challenges that would change the organisation as the years go by, and, therefore, will have to be looked at. For example due to political changes a local municipality office may need to be aligned to new boundaries that increase its scope.

2.4.1.4 Various kinds of training needs

Brown and Harvey (2001) stipulate that there are five kinds of needs, which are categorised according to their different sources as explained below:

a. Normative needs

These needs arise when the performance of a group or individual falls short of the generally acceptable standard. Organisations should, therefore, identify these shortfalls

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and inform the training department of the need that has risen from this. Brown and Harvey (2001) argue that organisation standards should determine whether a group or an individual need to go for further training. If the group or an individual do not reach the standard of performance set by a department or component within an organisation, he or she should be recommend for further training so that he or she becomes more productive.

b. Needs based on feelings

These are needs described by Barker (1999) as needs that are expressed by individuals, or stated by individuals in reply to a questionnaire. An example is a training practitioner expressing the need to present a course, not because there is any need but because the practitioner wants to present the course and feels the employees need this training course to enhance their production levels. In this case, only enthusiastic leaders will feel the need to present or offer training, while lazy ones will find conducting further training is a burden to them since it entails an increase in their workload.

c. Needs that arise on demand

Bailey (1987) points out that these are needs that arise when people want something, they will then create and ask for that thing, for example if their work requires them to perform a certain task which the do not have a skill on. An example could be a need for training could arise for an organisation due to new equipment being installed; this helps employees to work properly efficiently with the new machine. For example, when students register for a course a need might later on arise for a second, similar course. The

more the demand for further training in an organisation the more people will be sent for training.

d. Comparable needs

According to Good (1983) comparable needs arise when a group of individuals have certain benefits, while another group or individual with the same characteristics does not have the same benefits; for example employees may envy their fellow counter-parts that have previously been sent for training and also want to go for such training.

e. Future or anticipated needs

Isaak and Michael (1995) remark that these needs are also called projected needs. An example could be, if it is anticipated that interpersonal contact and conflict will increase between individuals or groups. This may lead to the presentation of a training programme on conflict management. These needs suggest that the concept of training need assessment entails more than just determining the gap. Training also requires to take into consideration aspects such as the feelings and opinions of interest groups.

2.4.2 Step two: designing training programmes or instructions and implementation of the programme

After determining an organisation's training needs and translating them into objectives, the next step is to design a training programme to meet those objectives. Dessler (2000) stipulates that designing a training programme is not an easy task because each training

method has its strengths, weakness and costs. Ideally we seek the 'best' method, thus, the one that meets our objectives in a cost-efficient manner.

Designing training and development programmes mainly involves choosing or selecting the method to use, as well as weighing the pros and cons of the method in the light of finding out if the programme will be effective or suited for the type of training needed.

In the following paragraphs, a number of training methods will be discussed as well as their advantages so as to determine which ones could best be used in which situations or training programmes. These methods are classified according to where training takes place, for example on-site-training and off-site-training methods. Furthermore, factors, which determine the methods to be used, will be discussed, as well as the factors that promote effective training.

2.4.2.1 On-site-training methods

As the name suggests, these are methods conducted on the job-site. This usually involves training in the total job, compared to off-site training, which involves only part of the job. In the paragraphs to follow, types of on-site-training will be discussed;

a. On the job training (OJT)

On-the-job training is described by Coperrider and Srivasta (1997) as the type of training, which affords a person a chance to learn by actually performing the job. This usually involves assigning a new employee to experienced workers or supervisors who do the

actual training. Usually no special equipment or space is needed since new employees are trained at the actual job location. The instructors are usually established workers and the employees learn by imitation. They watch an established worker perform a task and try to imitate the behaviour. At lower levels, trainees may acquire skills for, say running a machine, by observing the supervisor. This technique is also widely used at top-management level. For example, the position of assistants is often used to train and develop future top managers.

On-the-job training methods have several advantages. Reed, Pearson, Douglas, Swenbourne, and Wilding (2001) agree that the method is inexpensive compared to other methods, because, trainees learn while producing and there is no need for expensive off-job facilities like classrooms or programme learning devices. Furthermore, Reed et al (2001) find the method to be one of the best because there are few problems with the transfers of skills learnt because training location is the same. The method is easy to administer, easy to evaluate errors and provides quick feedback about the correctness of the trainees' performances.

On the other hand, Bushe (1995) stipulates that although the use of on-the-job training methods seems to have a lot of advantages, the methods also have some disadvantages. Firstly, he argues that on-the-job training methods are often brief, poorly structured and not more than "watch me and I will show you how to do it". Secondly, some established workers find teaching new recruits to be a nuisance and are not motivated to do so. Lastly, employees or trainees are pressured to master a task quickly. Thus, at the end of

the training session, they are expected to do just as well as the other experienced employees. The methods do not in most cases consider slow learners.

b. Job rotation

Job rotation is a method of training whereby workers rotate through a variety of jobs. They may be in the same job anywhere from a week to a year before they rotate to another job. Job rotation allows the employee to learn several job skills and a wide range of operations within an organisation.

Gerber et al (1996) observe that practice has shown that this method is mostly used with blue-collar production workers as well as white-collar production managers and it has many organisational benefits. Cross-trained personnel also provide greater flexibility for organisations when unexpected transfers, absence, promotions, or other replacements may become necessary. The method also provides new and different work skills giving employees a variety of experiences and challenges in a short period of time.

Reay (1994) points out that the following disadvantages of job rotation; firstly, if workers are paid on a piece-rate or commission basis, they can earn more money on some jobs and less on others. This, could be more demotivating to employees on some jobs than others. Secondly, he contends that due to individual differences, people are not equally suited for all jobs. Workers are then reluctant to rotate out of their 'best jobs' or their comfort zones. He further points out that job rotation also challenges one of the basic principles of personnel placement of assigning workers to jobs that best match their

talents and interests. Some employees are wary of a training system that puts them in jobs they are not good at or do not like. However, the workers willingness to learn a new job is a key factor in the success of a job-rotation system.

c. Apprentice training/Internships

Nadler and Nadler (1989) contend that apprenticeship is one of the oldest types of training programmes in existence, particularly common in the skilled trades such as plumbing, barber, carpentry, mechanist and painting. He explains that the method combines classroom instruction with on-the-job training, a new worker is trained for a long period (sometimes up to 5 years). The apprentice serves as an assistant and learns the craft by working with a fully skilled member of the trade called a journeyman or artisan. At the end of the apprenticeship programme, the person is 'promoted' to journeyman. Training is intense, lengthy and usually on one-on-one basis. Usually one apprentice is assigned to one journeyman. Argyris (1981) points out a disadvantage this method has. The amount of time an apprenticeships lasts is determined by the members of the trade. Individual differences in learning time are generally not allowed, so all apprentices have to work for a fixed time before they are upgraded.

d. Coaching and mentoring

Mentoring establishes a formal relationship between junior and senior colleagues, or between a person with superior knowledge and a less experienced employee. It is similar to a parent-child relationship, in that it provides guidance and tutorship in ways of career paths, exposure to important contacts and assignment of challenging work. Coaching or

mentoring is also called counseling by Berger (1986) and it entails the instruction of subordinates by his or her supervisor with the purpose of developing the subordinate's potential. Coaching is often considered as a responsibility of the immediate boss, who has greater experience or expertise and is in a position to offer sage advice. These two terms (coach and mentor) are so similar in concept that at times they are often used interchangeably in literature, and basically mean the same thing.

Mentors are older, more experienced individuals who advise and shepherd new people in the informative years of their careers. Donaldson, and Scannell (1986) remark that a mentor can be an important person in the development of the junior person, and may also be valuable for improving the job involvement and satisfaction of the student: Mentors begin by determining the employee's job and the direction of his or her career path. Together the mentor and the employee should develop career goals based on abilities and company promotional opportunities. Both parties should maintain a diary of events both as a feedback and agreement of the progress obtained.

Muchinsky et al (1999) discovered four states of the mentor relationship. The first is the *initiation phase,* where the more powerful and professionally recognized mentors recognizes the apprentice as a protégé (trainee). The second is the *protégé phase* where the apprentice's work is recognized not for its own merit but as the by-product of the mentor's instruction, support, or advice. The third is the *break-up phase,* where the protégé goes off on his or her own. If the mentor or protégé relationship has not been successful, this will be the final stage. However, if it has been successful, both parties

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continue on the last *friendship-stage/phase*. Here the mentor and the protégé have more of a peer-like relationship. The protégé may become a mentor but does not sever ties with the former mentor. In addition to this, there are two major dimensions to the mentoring relationship. One is psychosocial, where the mentor serves as a role model who provides counseling, acceptance and coaching. The other dimension is job-related, where the mentor provides exposure and visibility sponsorship, and challenging assignments to support the protégé's career.

In addition to this Munchinsky et al (1999) found that mentored individuals had more satisfaction, career mobility, recognition, and a higher promotion rate than non-mentored individuals. On the other hand, this method is not effective if the mentor assigned to it does not like the student or feels like he is a burden. In this case the student will be neglected or not given the desired support, but will be expected to perform as the mentor.

2.4.2.2 Off-site training methods

As described before, off-site-training methods are methods done off the job. There is more diversity in off-site training methods than on-site-training method, and they differ markedly in their content and approach to learning. Below are some of the mostly used off-site training methods.

a. Lecturers

In this method, a large number of people are taught at the same time, making it quite a cost efficient method of training. However, Laird (1987) indicates that practice has

shown that the more diversified the audience, the more general the content usually becomes. Hence its utility for imparting specialized knowledge is more limited. With a more homogenous audience, a trainer (a teacher) can direct the lecturer to specific topics and techniques, which are often more beneficial than using some broad-based material. Thus, lecturers are an effective way to train large numbers of people at once, particularly if they have a specific training need.

Craig (1986) argues that this method's disadvantage is that there is usually one-way communication, little chance of dialogue, questions or discussions of individual problems and special interests. On the other hand, he points out that the method's advantage is that it is a quick and simple way of providing knowledge as mentioned above to a larger group of trainees. For example, when a sales force must be taught the special features of a new product this method could be effective. The method also has an advantage of being flexible and economic. That is to say, a good lecture can achieve excellent results within a short space of time, provided lectures are carefully structured and presented. Lectures are seldom presented on their own: they are usually accompanied by a variety of audio-visual aids and tools.

b. Multimedia computing Training methods

Multimedia training combines video, text and sound with the ability of computers to stop, retrieve and process information . Modern computers have built-in capabilities, that allow them to marry text, numbers and graphics with music, full motion and stiff-frame video (snapshots), animation, and voice messages. Couple multimedia with techniques that

allow the user to interact with the material presented, and you have a technology that can be mesmerizing as television, yet at the same time, pushes the user to become intellectually engaged. Multimedia technology could be used for educational and training purposes. Interactive multimedia means that textbooks could be presented on a series of CD-ROM optical strong disks. This also includes textbooks that contain videos, colour pictures recordings of authors and other professors, or people being viewed in additional to regular text. Learners can call up on screen quizzes or if they come across a concept that interest them they are able to browse on-screen for related topics.

An example of the usage of multimedia computing is the IBM computers who use multimedia training programmes to teach insurance sales representative about the policy options which customers have. The new programmes double the retention of sales representatives when compared to traditional training manuals. Multimedia technology also use powerful emerging digital communications networks, desktop to desk-top videoconferencing and file sharing.

Multimedia has an important social role to play by creating a more virtually realistic and interactive environment in which education and entertainment can take plan. Multimedia is being used to train doctors, lawyers, engineers and students. Simulations are particularly useful for training employees to work complex systems. Below are some of the multimedia training methods:

(i) Audiovisual materials.

Beardwell and Holden (1995) describe audiovisual materials as materials used for training and learning. This covers an array of training techniques, such as films, slides and videotapes. They further contemplate that the advantage of this method lies in the fact that it allows participants to see as well as hear, and is socially quite good at capturing students' attention. The methods' main disadvantage is that it underscores the importance of motivation and interests as necessary conditions for learning. For example, the South African Toyota Motor Company uses films in its dealer training session to simulate problems and sample reactions to various customer complaints. Audiovisuals are also more expensive than conventional lectures. Tracy (1984) illustrates in the following examples as to how audiovisual materials could be used:

1. *When there is a need to illustrate how a certain sequence should be followed over time,* such as when teaching the repairing of telephones, the stop action, instant replay, or fast-or-slow-motion capabilities of audiovisuals can be useful.

2. *When there is a need to expose trainees to events not easily demonstrable to live lectures* such as visual tour of a factory or open-heart surgery.

3. *When the training is going to be used organisation wide* and it is costly to move the trainers from place to place.

(ii) Videoconference distance learning

Another form of the multimedia training is videoconference distant learning, which is used to train employees who are geographically separated from each other or from the trainer. Nadler (1987) defines videoconferencing as a 'means of joining two or more

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distant groups using a combination of audio and visual equipment.' Video conferencing allows people in one location to communicate live with people in another city or country or with groups in several other cities. The communication links are established by sending specially compressed audio and video signals over telephone lines via satellite. Keypad systems could also be used to allow for audience interactivity. This method's main advantage is that, lecturers can improve after seeing videotapes with new electronic recording equipment and that in most cases it is live and becomes effective because trainees seem to feel like they are in one lecture hall and get information the same time as the other group. Its disadvantage is that the method is rather expensive. The machines, video and telephone technology is very expensive and only big organisations can afford such training methods.

(iii) e-Learning (computer assisted or programmed instruction)

This training method involves the use of the computer-based system to interactively increase the trainees' knowledge or skills. Andrews (1998) describes the method as one that involves presenting trainees with computerized simulations and the use of multimedia including videotapes to help the trainee learn how to do the job. Programmes are designed to make employees feel that the computer is not totally impersonal.

e-Learning is a mixture of different preferred methods delivered to the learner through the use of information technology (Laudon, Traver and Laudon, 2003). This is supported by educational instructional design and engaging contents. Instructional design is the efferent development of the instructional specifications using learning and instructional

theory to ensure the quality of instructional theory. Instructional material could be delivered on Compact Disk Read Only Memory (CD-ROM) over the Local Area Network (LAN) or the Internet. LAN is a combination of hardware, software and communication channels that connect two or more computers within a limited area. This includes Computer-Based Training (CBT), Web-Based Training (WBT), Electronic Performance Support Systems (EPSS) distance or online learning and online tutorials.

e-Learning provides learners with engaging interactive information that can be accessed in a setting that is free from time and place constraints. Students work through the lessons at their own pace. The material in media-rich. By using e-Learning, students' progress and achievement can be assessed, with customized feedback and evaluation. e-Learning focuses on 3 Dimension (3D) learning techniques incorporating visualizations, gaming and virtual environments. Animated characters to support the learning content. Conversion of existing material into engaging learner. The use of Real-life scenarios. Interactive assessments (Cross and O'Droscoll, 2005)

Berger (1986) outlines the following advantages. Firstly, individual scheduling reduces training time, and eliminates traveling expenses. Secondly, trainees are able to work at their own time, place and pace, as there are able to begin and end lessons when convenient and enter a programme at their own level of achievement.

Du Toit (2004) outlines the following advantages of e-Learning: The method proves to yield good results for the socially inhibited learners who learn better and faster in an

individual context especially where non-socials skills and processes are to be learned. The method also turns to be effective where there is a lot of simulation as well as direct levels of interactivity between learners and the programmes. The variety of 'roll-out' methods such as DVD's and videos facilitate learning and enhances the practicability of certain tasks.

Although e-learning seems to be costly in the short-run, the method is cheaper in the long-run. In most cases retraining is cheaper than the initial training.

In terms of offering the lessons e-Learning method is emotionally consistent (computers unlike humans do not have good days or bad days of teaching). If the trainee does not learn, he or she generally cannot move on to the next step. This increases trainee motivation because of the response feedback of the programme. On the other hand, the method is also consistent with the assessments because they are centralized. Uniform assessment standards are pre-set and there is no human element of biasness in all assessments.

c. Conferences

This training method stresses two-way communication. It is particularly effective when the ratio of trainee to trainers is not significant. Fisher et al (1993) argue that this method is also very useful when the material needs clarification or elaboration or where a lively discussion would facilitate understanding. Sometimes the lecture method can be followed

with a conference discussion, giving the participants a chance to share opinions about the materials. Participants sit facing each other around a conference table.

De Cenzo and Robbins (1994) challenge that the success of this depends heavily on the personality and skills of the facilitator. That is to say a good leader knows when to lead the discussion and when to allow others to lead. They further explain that participants willingness to acquire knowledge and explore attitude change (and the trainers' ability to facilitate such learning) influences the success of the method. The advantage of this method over the lecturer method is that: each trainee plays an active role in the learning process, and is achieved by building on ideas contributed by various participants. One trainee learns from another, through interactions. The disadvantage of this method could be that some trainees could participate more than others and some might find the discussions irrelevant to their field.

d. Simulation

Simulation is a technique that tries to replicate the work setting in which the trainee will have to perform. The objective of this method is to have trainees learn from their own actions, as well as from the group discussion that follows the simulation in a debriefing session. There are various forms of simulation techniques explained below by different authors:

In-basket exercise-this technique has been used from as far as 1950's to assess and develop managerial skills. This is described by Erasmus (1996) as a managerial selection

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device, which also helps managers know how to prioritise work and make decisions. Some recently developed in-basket exercises are run on microcomputers. The electronic in-basket exercise asks the trainee to make a decision, after which the program responds with the next decision point, based on the answer to the previous one. In this way, the trainee is able to experience the consequences and make future decisions based on these decisions.

The second technique is the *role-playing technique*, which is described by Baird et al (1983) as a technique that was developed earlier than the in-basket exercise (1930's). In this technique, trainees and sometimes trainers assume the role of characters and act out a simulated situation. The primary purposes of role-playing are to analyse interpersonal problems and to develop human relation skills. The technique can also be used to place an individual in another person's role, such as a manager in a subordinate's situation. Such role reversal allows the manager to observe at first hand what the subordinates are experiencing. The success of this method depends on the participants' willingness to adopt the roles and to react as if they were really in the work environment. If the participants do not become thoroughly involved, very little learning takes place. One advantage of this technique is the dynamics of the role-play as it unfolds. Decisions can be made on the spot. Participants respond immediately to the other players. Nadler and Nadler (1989) points out that this spontaneous action moves closer to reality for the trainee. For example, interpersonal interaction in a role-play is often characterized by real emotions and feelings. Thus, the trainee not only deals with the factual content of the communication but also with the emotional and interpersonal part of it.

The third technique is the *leaderless group discussion*. This is another technique used in assessment centers and applies equally to training. It is a larger-group simulation, featuring four to eight trainees working together to solve a hypothetical problem (Tracy, 1984). Group members are frequently assigned different roles to play in the simulation and given information unique to that role. For instance, a common scenario involves a city council trying to make a decision about the allocation of funds. Different trainees take on the roles of the police commissioner, head librarian, sanitation engineer, director of recreation and parks and so forth. In analysing their behaviour after the simulation, individuals learn more about their interpersonal and decision-making skills and styles.

Lastly, the other important simulation technique worth mentioning is the *computerised business decision-making game technique*. A business simulation or game technique may be defined by Erasmus et al (1996) as a sequential decision-making exercise structured on a model of a business operation, in which the trainee assumes the role of managing the simulated operation. In the game, the trainee or group of trainees are asked to make decisions about organisational matters such as investment in research and development, pricing and entering new markets. Based on these decisions, the program provides computer-generated feedback on how the organisation performed. With this new information in hand, the trainee is, therefore, asked to make another series of decisions, which are used in the next run of the simulation.

The primary objective of simulation games are to teach general management skills such as decision-making, setting priorities, long-range planning, effective use of time,

personnel and equipment. Dessler contends that simulations games also helps trainees develop an appreciation of the complexity of the organisation and the many factors that must be considered before making a decision. The games also teach individuals the concepts of teamwork, risk taking as well as the importance of functional skills.

Mobey et al (1995) point out two advantages of business simulation games. The first advantage is that the games allow managers to experience real-world problems without having to suffer the consequences of poor decisions. Secondly, they allow time to be compressed. With one of these games, trainees can experience several years of organisational performance in just a few hours. Graham and Benett (1993) both argue that the major disadvantages of these games are that sometimes trainees focus on beating the system rather than on learning the management principles being presented by simulation.

From the above explanation of different methods, their advantages and disadvantages it can, therefore, be concluded that no one method is best. The ideal method is a combination of several methods for example a combination of three methods such as lecture, discussion and performance. The trainer or instructor should select the method that best suits the target audience as well as one that will yield the intended results or objectives. Below are some of the factors that could influence a trainer decide which method to use.

2.4.2.3 Factors that affect course development (that determine

which training and development methods should be used)

There are various factors that affect the design of training programmes and must, therefore be taken into consideration when designing a training programme. These factors could also aid decision markers on the selection of training and development methods for managers and other employees; below are some of the factors to consider:

a. Developmental objectives

Ivancevich and Glueck (1986) have the view that when designing a programme, leaning objectives should be clearly stated and the best means of training or development of employees should be stated too. The training method should, therefore, be chosen in line with the intended results so that the process meets the end objectives. Training must therefore be goal-orientated.

b. Responses of learners and feedback

The design and methods planned for the course should also be determined by whether they allow instructors to correct the errors or reinforce the learning that has taken place and the extent to which managers or employees in the training situation can measure their own response. Ferrel and Hirt (1993) contend that the ideal training and development method gives the instructor or trainer the opportunity to observe the development of his or her trainee and correct him or her by giving immediate feedback on performance. The learning curve overleaf (figure 2.1) can be used to illustrate a person's developmental patterns:

Figure 2.4.2 Learning Curve

Fully Competent   100%

Plateau

50%

Learning takes faster

Ignorance   0%

Learning period
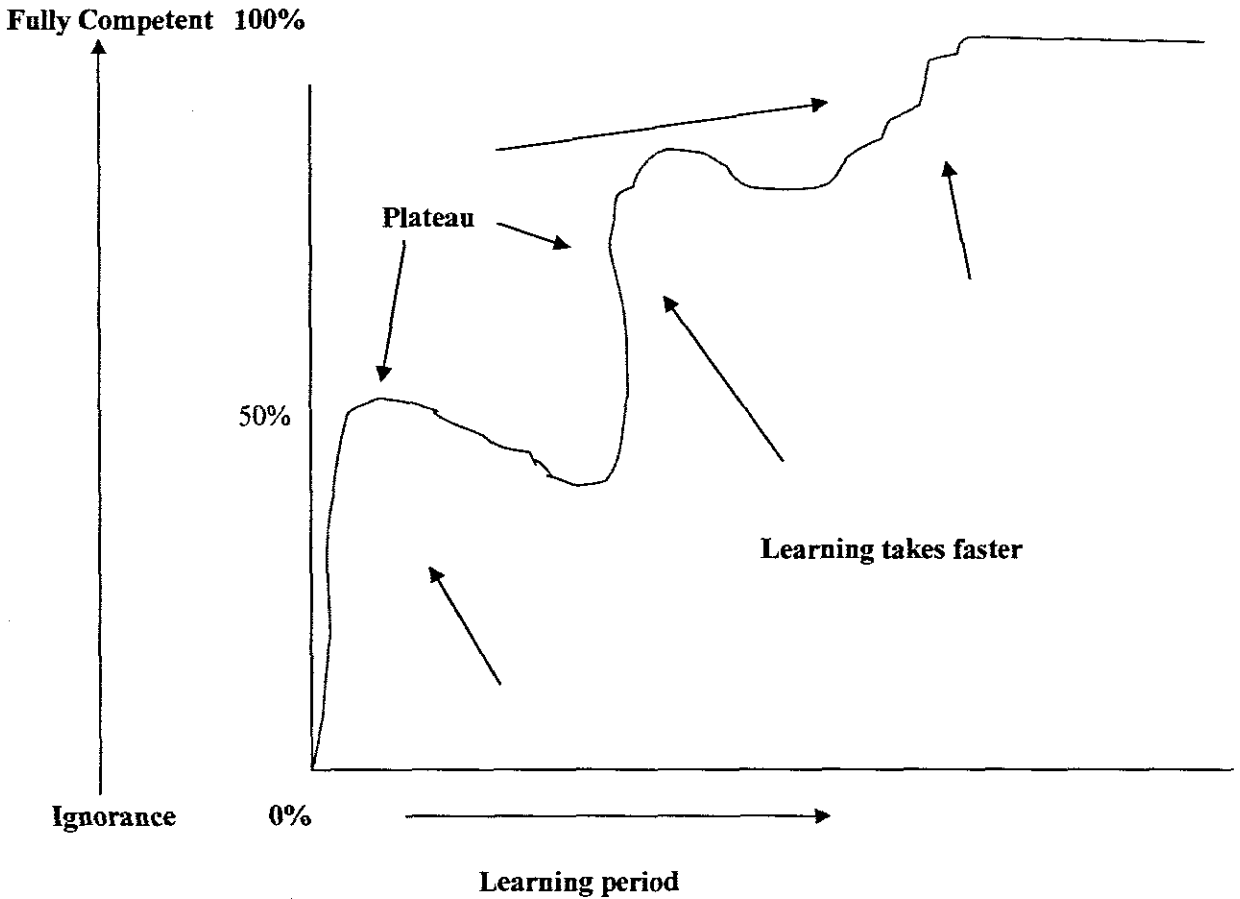
Gerber et al (2001) explain that competency to perform a task can be measured in a variety of ways such as measuring the number of mistakes made, marks obtained in a test and the time it takes to master the course content. As plotted in the graph above, where the curve moves up, learning takes place quickly, while where the curve levels out, the learning tempo is slower. The point at which the curve levels out is known as a *plateau.* If a student cannot learn any further, he or she is said to have reached a psychological ceiling or maximum efficiency whereby the curve will form a straight horizontal line. A plateau in the learning curve is experienced when, for example, students are not

motivated, when given poor instructions or when a student has to deal with much more content.

Ivancevich and Glueck, (1986) argue that people tend to learn more difficult subjects slowly at first, mastering the content at a more rapid tempo as they become more competent. Less difficult subjects are initially mastered quickly, but the learning tempo decreases as the level of perfection increases. If the subject is easy, most of the course content should be presented at the beginning of the programme, as easier course content are absorbed faster. With regard to more difficult subjects, the course content should be distributed evenly over the programme interspersed with regular practical lessons.

c. The instructor's knowledge and level of skills

The instructor's level of competence is another factor worth looking at. It should thus be noted that successes are attributed to good teaching (Cascio 1998). When assessing the success of training and development programmes, management should be careful to disregard those results that are not due to instructor's teaching. Instructors therefore should be competent, because instructors that use methods that are not familiar will spoil the learning experience and may cause unpleasant consequences or results for the learners.

d. The time available

Bellis (2002) has the opinion that the amount of time available for a specific training and development programme determines the type of method to use. Some methods require

more time than others. Thus, if there is limited time, shorter training programmes as well as methods that have a direct approach should be used and vice-versa. For example, management games and case studies require more time to be effectively used than lecture and brainstorming.

e. Adaptability of methods

Particular methods can sometimes be effectively used for different types of learning for trainees. Specific methods can be used in a variety of activities because supervisors and managers come from different environments in an organisation (Read and Barrington, 1997). An example of an extremely adaptable training method is programmed instruction. When selecting methods, management should bear in mind that some training methods are easier to use and are more readily adaptable with a small group of learners while others are not as easy and are not effective on larger groups. For instance, the smaller the group, the easier it is for role-play exercise to satisfy the learner's needs.

f. Costs

This is one of the most important factors to be considered when selecting a training method. Olivier (1998) added that it is advisable that the following elements should be considered when selecting the type of training development programme:

✓ Sophisticated training and development programmes can be costly, even too costly to implement;

✓ Certain training aids may be too expensive to use;

✓ Payment for instructors and cost of facilities need to be considered as well as tuition fees for learners and external off-the-job courses;

✓ Costs should be measured against effectiveness of course strategies; if gains expected of a particular strategy do not offset additional cost incurred by the use of that strategy a less costly institutional method should be sought, even though it may be slightly less effective.

The selection of training and development methods should therefore be carefully considered by instructors and used as guidelines when developing training and development programmes so that the methods become effective and advantageous to learners and the organisation itself (Read and Barrington, 1997). If a mistake is made in the selection and wrong training methods are used, the learner's morale might go down, profits may be lost, the image of the instructor and the training department in the organisation concerned may be tarnished.

2.4.3 Step three: evaluation or analysis of the impact of training

This is the last step or phase in the training process. Moorby (1996) defines evaluation of training as the assessment of the total value of the training system, training course or program in social as well as financial terms. Evaluation is without doubt one of the most important aspects in the training process. Most organisations including the one under study do not evaluate their training and development programmes, which is not a good idea if any organisation wants to succeed. Operating without any training evaluation programme is the same as an obese person wanting to lose weight but does not weigh

himself before and after the attempted weight-less programme. One would, therefore, have no accurate means of determining or evaluating success or failure. Similarly, unless top managers insist on the evaluation of training and development programmes, there is no possibility of determining the exact benefits.

Secondly, if training is not evaluated, there will be no record to determine whether the financial investment made by the organisation in its human resources has been successfully utilized or whether the overall competency of skills of employees have increased. This, in essence, therefore, means that the evaluation process focuses on two aspects: *the effectiveness of training*, which determines whether the correct type of training needs were presented and the *efficiency of training*, which determines whether the correct methods and techniques were used to impart the course content to the students.

Gerber et al (2001) suggest that training programmes should not be undertaken unless suitable criteria for their evaluation has been agreed upon by the instructions and the trainees, who have been built into the programme. They further explain that evaluation can only be effective if it is based on clear and specified objectives that are determined before hand and quantified. Evaluation should, therefore, be a continuous process and not a once off exercise.

2.4.3.1 Purpose of evaluation

Bramley (1991) has the opinion that evaluation of training could be used to make decisions about:

- Individual learners needs, the instructional plan and sequence, their grouping and feedback;

- Course improvement (deciding on the most appropriate methods and materials, and where and how to revise the material);

- How effective the system is.

Deming (1982) contends that other additional purposes of evaluating training could be:

- To determine whether the design, up to a particular point meets the needs and criteria determined earlier;

- To modify the design, as required, based on feedback from selected person's;

- To obtain approval from those concerned to proceed with the next phase of developing the system

2.4.3.2 Training evaluation, effectiveness, reliability and validation

Evaluation of training should, therefore, be effective, reliable and valid. A *reliable* measure is the one that gives the same score every time it is used. That is to say, if re-tests are made the measure will give the same results regardless of who did the measuring or the time it was done. Its *validity* on the other hand is based on the intention of the measure. A valid measure is the one that measures what it intends to measure. According to Moorby (1991) validity has two components, namely internal and external validity. *Internal validity* is described as a series of tests and assessment designed to

ascertain whether a training programme has achieved the behavioural objectives specified. It measures changes in knowledge or attitudes of the trainees, thus, whether the instructor conducted the course effectively and whether the programme, itself is effective. On the other hand, *external validation* is said to be a series of tests and assessments designed to ascertain whether the behavioural objectives of an internally valid training programme was realistically based on an accurate initial identification of training needs in relation to the criterion of effectiveness adopted by the organisation and the other organisations.

2.4.3.3 Criteria measuring or evaluating training programme

There are a lot of methods used for testing and evaluating training programmes, and they are all not equal in terms of value. While some are scientific, others are haphazard and restricted to a single criterion. According to Gerber et al (2001) there have been efforts by a number of researchers to implement scientific evaluation of training. Kirkpatrick (1998) designed a valuable system that ensured that evaluation was scientifically done. He suggested that participation reaction, extent of learning, behavioural changes and results should be measured according to levels of training ranging from simple to complex or alternatively according to frequency, from popular to seldomly used. These four evaluation criteria apply to all types of training programmes, irrespective of whether they are supervisory or skill training.

(a) Participation reaction

This focuses on whether the trainees liked or disliked the training programme, that is to say to what extent they were satisfied and felt they had gained from the programme (Middleton et al, 1993). This information is obtained through a questionnaire. Questions are also asked about the course leader's presentation, for example whether he or she was friendly and kept sessions interesting. This includes administration of programme for example accommodation, what trainees felt about duration of the course, refreshments, notes and seating arrangements. These issues help determine whether the training program as such was of required standard. Reaction questions are distributed at the end of course and are collected immediately so as to ensure that everyone has submitted. The major drawback, therefore, is that the trainees are unable to assess the methods used objectively and, therefore, their responses cannot be relied upon. Employees will normally assess the trainer depending on whether they liked the person or not, not necessarily his teaching methods.

(b) Extent of learning

This criterion measures the extent to which trainees assimilated the material presented in the training programme in terms of skills, knowledge and attitudes.

Rothwell and Kazanas (1994) observe that *Skills* are usually easy to measure, especially in low-level workers. Performance is measured before and after training (pre-and-post-testing). For example, the training of a crane lifter at the National Ports Authority would be considered successful if after training the crane lifter is able to lift goods using the crane; a number of goods lifted could also be counted. Other methods used are paper and pre-tests.

These could be essay-type tests, objective tests requiring free response or test requiring true or false responses, or multiple-choice responses to questions. Once again a comparison needs to be made of pre- and post-tests measures to determine how much learning has taken place. Trainees could also be subjected to role-playing situation so that the evaluation can observe how certain skills have improved.

According to Brown and Harvey (2001), *knowledge* should be a pre-requisite for a person who is going on training. The trainee's knowledge should also, therefore, be assessed when evaluating his or her skill. The method of measuring the achievement of cognitive objectives is the use of a criterion-referenced performance test. A criterion-referenced test as described by Carrel et al (1998) is usually given before and after instruction so as to assess gains. Pre and post-test measurement should be objective. If the training programme is long, it may be necessary to undertake interim tests to evaluate the trainees' changing knowledge so that adjustments can be made to the programme if the results are not on target.

Cornelius (1991) contends that *Attitude* is one criterion that is difficult to measure because attitudes are an expression of people's thoughts and feelings. He further argues that two methods can, however, be used: trainees can either make their own judgments and say what they think of a new situation, or they can be observed and inferences can be drawn from their performance in a particular job. Observations to determine a trainee's attitude is, however, subjective and should be used with circumspection. Another method which can be used is a well-designed semantic differential test before and after the training to

determine whether the trainee's attitudes towards given issues have changed. Once again it should be done with circumspection, because it requires specialist skills.

(c) Behavioural changes

A criterion for evaluating the effectiveness of a training course is the degree of behavioural change discernible in a trainee (Moorby, 1991). Differences in job behaviour are far more difficult to assess and measure than trainee's reactions and learning. Moorby (1991) says that behaviour measurement can only be considered accurate if the training needs analysis and training objectives are described in terms of desired on-the-job behaviour. It is then possible to measure the difference between the trainee's undesirable pre-training behaviour and his or her new post-training behaviour. Olivier (1998) is of the view that performance appraisal before and after the training, should be done and the following persons or groups could be involved; the trainee, his or her superiors, subordinates, and peers, or other people familiar with his or her performance. A selected few organisations in South Africa use score sheet for this purpose. The evaluation could be done approximately three months after completion of the training, to enable the trainees to put into practice what they have learned. He further suggests that questionnaires, interviews, on-the-job observations by the instructor or superior and voluntary feedback by the trainee can be used as the methods to evaluate the trainer. The latter is particularly important because assessment done by the trainee himself or herself is very valuable provided it is objective.

(d) Results

According to Riggs and Felix (1993) the degree of achievement of the objectives formulated for the training programme, based on the needs analysis, determines whether the training course has been successful. They both agree that achievement of objectives could be seen in improved profits, reduction of costs, lower staff turnover, reduced absenteeism or grievances, an increase in the quality and quantity of production, improved morale, or whatever was stated as the training objectives. Some of these issues are easy to evaluate while others like higher morale among employees are practically impossible to evaluate accurately. A number of factors could affect a trainee's performance following successful training, but valuables beyond a trainee's control may impair performance and distort training results.

Riggs and Felix (1993) argue that the above-mentioned factors may result in the performance of the trainee to be worse or unchanged, but the blame should be placed on the training programme or on the trainee. Achievement of the objectives (as opposed to trainee's objectives) also has to be measured at various times to ascertain the effectiveness of training. Evaluation should take place immediately after training to measure differences in the performance of employees. Deming (1982) explains that evaluation should be done three months after training to evaluate behavioural change in particular; and approximately a year after training to determine whether the profits of the organisation have in fact increased, whether employee turnover has decreased or whether the morale of the employees is better. These changes may be due to other factors, such as a recession, but they should, nevertheless, be related to the training done. Other issues that could

negatively affect the results of the training and development are jobs that change rapidly, new equipment and techniques as well as environmental changes, which should be looked at in the evaluation.

2.4.3.4 Evaluation instruments

Evaluation instruments are used to determine the effectiveness of the various elements of the instructional design or of the training system. Bramley (1991) supports the notion that instruments should be evaluated so as to determine whether the components of the training system are working as required. Secondly to ensure that all the components are interacting as envisaged by the instructional designer as well as ensure that the system produces the required skills.

A variety of instrumentation can be used during the evaluation process to collect the required information on which decisions are based. Such instruments could include the rating method, the questionnaire and the interview method which are explained below.

Deming (1982) defines the *rating method* as the process of evaluation by judgment. This judgment involves collection, correlation and interpretation of facts and impressions to arrive at an opinion. He argues that results and facts of the training process should be rated or judged. Deming (1982) also contends that there are two classes of rating namely relative and absolute rating. *Relative rating* is used when several individuals or situations have to be rated in comparisons with others while *absolute rating* requires the

rater to assign an absolute standard value to the factor or criterion being measured with no reference to other individuals or situations.

According to Neuman (2000) the *questionnaire method* is a method that is often used to obtain feedback with respect to a particular course, unit of instruction or some other element of a training system. This method enables the instructional designer to standardise and see objectively the observations of many individuals and it focuses attention on particular aspects of observation and evaluation. The questionnaire method is a particularly useful one for data collection when the designer cannot personally interview all the people from whom feedback needs to be obtained.

Bless and Higson-Smith (1995) describe the interview method as a method that is normally used in conjunction with other data collection methods. They further point out that it is useful to obtain information directly from others in a face-to-face situation. Information obtained by this method may include the description of events, behaviour, attitudes, values or perceptions. The method becomes reliable because the information is first hand, and accurate because unclear questions can be clarified immediately.

2.4.3.5 The cost benefit ratio of training and development

Training and development should be evaluated in terms of its costs and benefits to determine whether there is improved performance (Kearsley, 1982). Top management of any organisation needs to know what the contribution of training will be to profit before they support such training. That is to say, return on investment needs to be calculated.

Each expenditure on training should be weighed and compared to the gains (output) of training. This then helps in calculating the real cost of training.

a. Costs

Kirkpatrick (1998) describe costs as any direct and indirect money that is used for planning, presenting and evaluating training. This also includes the costs incurred when the trainees go back to work. He also points out that practice has shown that training expenses include the following:

- Lost work time of trainees, estimated in hours for the duration of the training and multiplied by the hourly salary or wage. This gives the cost of work time trainees lose while they are on a course;

- The time of the planners, staff, instructors and others whose time is used by the training programme. This is calculated by multiplying a standard cost by the number of time estimated for preparation, supervising and evaluation of training;

- Direct costs include materials, books, notebooks meals, traveling, housing, telephone, visual aids, as well as all other costs incurred in the preparation and presentation of the training programme; and

- Other expenses could include: fees for guest speakers, consultation and special aids such as videotapes.

The total cost of the programme is therefore determined by adding up these costs. The value of training will only become apparent once the benefits have been calculated as well.

b. Benefits

On the other hand, Noe (2001) contends that when assessing the benefits of training, certain aspects should be taken into account. That is to say certain questions should be asked such as:

- have the stated objectives been met in terms of increased productivity?

- was the expenditure incurred for the training justified?

- can one identify those area with the most potential benefits to ensure that their objectives are given priority as well as?

- can one ensure that the training received is in fact been transferred to the workplace?

There are various methods that can be used to assess benefits ranging from managers reports, production reports, plant efficiency reports, quality control reports, sales reports, attendance records, earnings and recommendations proposals to senior managers, which might result in changes in techniques or procedures in the organisation.

On the other hand, fewer accidents, increased productivity, increased sales, fewer warranty claims because of improved quality, less down time, improved customer service, lower recruitment and labour turnover costs, less scrap and lower maintenance costs could be some of the direct benefits resulting from training. It is, therefore, important to ensure that the improvements are attributed to training and not to new equipment, measured supervision or other factors (Deming, 1982).

Humphrey and Halse (1991) bring to our attention the fact that it is also important to know that training benefits cannot be evaluated in terms of money alone. He argues that apart from the monetary benefits that can be realized, other intangible benefits such as greater individual job satisfaction, improved communication, greater adaptability of employees in the organisation, fewer grievances, better capital investment decisions by managers, greater acceptance of training and positive attitude among managers, supervisors and employees' need for retraining in the organisation as mentioned above, should also be looked at when evaluating training.

2.5 Conclusion

Management development is aimed at preparing managers to perform their present and future jobs in the organisation effectively. Even board members are provided with training and development skills. Board games are provided through multi-media technology. E-Learning update skills on latest processes and functions. Training, on the other hand, primarily aims at teaching lower-level workers the skills they need to perform their present tasks effectively. Training or development cannot be effective unless attention is paid to various factors, such as the skills of the instructor, which would affect the method to be used.

On-the-job and off-the job methods could be used for the development of managers, on-the-job methods being more popular. With so many different methods existing, organisations can choose specific methods to suit their identified development needs. Special attention should be given to advancement of semi-skilled employees in

organisations as stated at the beginning of the chapter. This is because most semi-skilled workers are directly involved in the production process and thus improve production directly.

The desire to remain economic, technical and competitive in the market place has turned the training and retraining of employers and employees alike to be important. Trainers should, therefore, take note of all factors that affect training in an enterprise as well as use proper training methods and programmes to ensure that organisations achieve the required level of competence.

Finally, if training and development investments are taken seriously, the training department of an organisation should convince top management that these interventions increase output. That is to say, the benefits outweigh the costs and that its success directly leads to an increase in the profitability of the organisation. The cost-benefit ratio as discussed above could help in evaluating the effectiveness of training and development. The development of criterion tests and evaluation measures is an important part of the training design process, as it constitutes the means whereby the success of training is assessed. It is, therefore, important to ensure that evaluation procedures and tests be used to fulfill the requirements of valid and the reliable criterion measures, as discussed above.

Chapter Three

THEORY OF TRAINING AND DEVELOPMENT AS IT

APPLIES TO THE SOUTH AFRICAN CONTEXT

3.1 Introduction

South Africa is in a position where there is a shortage of skilled labour, thus 9 % of the economically active population being skilled, leaving the other 91% unskilled. At the same time there is a high rate of unemployment among the skilled population. The country is faced with an enormous challenge of increasing the productivity of lower level workers if the high rate of unemployment is to be reduced. With the shortage of highly skilled managers and employees in South Africa, it is also essential that all training and development possibilities be fully exploited. Charteejee (1999) suggests that the task of providing training whether career-orientated or not, cannot be borne by the formal education system alone, as it is simply not possible in practical terms to deal with such vast numbers. Organisations therefore also have a responsibility to contribute towards the effective training of their employees, and in so doing to counter the national illiteracy problem. A major challenge faced by most organisations in South Africa is to train its employees, have effective training programmes for employees and perform continuous skills and up-grade programmes to ensure that employees have the necessary knowledge,

skills and attitude to do their work successfully (Erasmus et al, 1996). This is indeed what empowerment should stand for.

This chapter addresses issues that have an influence on the provision, regulation and certification of workplace training. The chapter starts off with the current status of the South African market with regard to training and skills development. It basically discusses the demand and supply of skills with a focus on which fields or areas still need to be developed (skills gaps) as well the areas that are sufficiently developed. The chapter then gives a few solutions as to how the demand and supply of skilled labour can to some extent reach equilibrium, thus the demand for skilled labour equaling the supply. In addition to this, the chapter also gives an overview of the macro-strategic factor that influences the development of South African skills training and development policies. The chapter further continues to give perspectives on the policy environment that influence skills development. With this, a background against which the reader needs to contextualise workplace training is given.

The chapter also looks into the issue of training legislation. An overview of the training legislation which governs training and skills development in South Africa is outlined. The three pieces of legislation namely Skills Development Act (SDL), Skills Development Levies Act (SDLA) and South African Qualifications Authority Act (SAQA) are also discussed to give light on how the government envisages to influence skills training and development in the country. Furthermore, the chapter outlines possible training policy options as suggested by various authors to stimulate some thought and to

broaden the chapter's perspective on training as an instrument to promote economic growth and social development.

The chapter then concludes with issues on funding of skills and training programmes in South Africa. The funding topic focuses on a number of things that impact on funding of workplace training, namely, who is responsible for training, what are the costs and benefits of training for individuals, organisations and governments, the different sources of funds, as well as the application thereof. The topic also gives out alternatives on how the government can generate training funds. It further goes on to discuss briefly regulations with regard to certification of training and finally highlights the benefits underlying the levy-grant scheme, which the current South African government is using.

3.2 Status of the South African labour market, skills development and training legislation

If South Africa wants future economic growth, serious attention will have to be given to obtaining and utilizing skilled human resources. According to the *1990 Annual Report of the National Manpower Commission* (1991), structural changes, advances in technology and other developments have a continuous influence on the demand for improved skills. This makes it necessary for the authorities concerned and the private sector to periodically adopt their employment, education and training policies. South Africa is at present experiencing a double imbalance in its labour force. On one hand there is an excessive demand for skilled workers, while on the other hand there is an excessive

supply of unskilled workers. According to the report mentioned above, the various levels of human resources were identified as follows:

- *High-level human resources* included all engineers or engineering technologists, engineering technicians, draughtsmen, architects, quantity surveyors, natural life or agricultural scientists; natural or life technicians; other technicians, doctors, veterians, naturalists, chemists, nurses, careers in education, religion or law, accountants, auditors, careers in management, administration, the arts, sport or entertainment; and other professions.

- *Middle*-level **human resources** on the other hand comprises of clerks, salespeople, miners, transport workers, workers in various services, supervisors, technical assistants, artisans, apprentices.

- *Low*-level **human resources** include semi-skilled and unskilled persons.

The shortage of high-level human resources leads, among other things to reduced levels of productivity resulting in poor-quality and services. It also retards technical innovation and triggers upward pressure on the rate of inflation on account of the large turnover of qualified staff, and eventually a lower rate of economic growth. The inevitable result is a negative effect on the welfare of the population. Carrel, Elbert, Hatfield, Grobler, Marx & Van der Schyf (1996) suggests that after having identified certain levels of skills needed in an organisation, training and development programmes should be designed to address those needs.

It is also worth mentioning that until recently, women have not been fully utilized as much as men have been. By the year 2000, the proportion of women in high-level categories were 39.9% and 36.9% in the middle levels (Gerber et al 2001). Since that time to present, there has been little progress if any, in most organisations, in terms of a more balanced gender representation at all levels. In total, 28.8% of workers were women that were employed in traditionally female occupations such as nursing and teaching. The main reason that restricted female participation, until recently, were the discriminatory human resource policies that existed then, the tax system, lack of encouragement as well as the inadequate career planning for women. As far as legislation is concerned, considerable progress has been made in eliminating discriminatory measures, for example the amending of Wage Act of 1993, Matrimonial Property Act of 1984, Separate Taxation, Affirmative Action Policies as well as the Employment Equity Act. All the above initiatives have helped organisations employ women and blacks into top positions who were both excluded because of the old legislation.

In line with developments in other countries, a sharp increase in demand for high-level human resources in South Africa is expected, particularly in occupations in the engineering, technological, scientific, medical and teaching spheres. At a projected real economic growth rate of 2.7% per year, the demand for high-level human resources is expected to increase between 3% and 4% per year, that is between 500 000 and 6000 000 people. For middle-level human resources, the expected growth in demand is between 2% and 3% per year, with particularly sharp increases in the demand for occupations of

fireman, supervisors, service worker, artisan and salesperson. The least growth will be evident in the demand for low-level human resources (between 1% and 2% per year) and this level will also have the greatest over-supply. It is therefore clear from the above that South Africa is experiencing acute shortage of high-level human resources in particular, and the prospects of overcoming these shortages before the year 2005 are slim. Even at a growth rate of 2.7% annually, as predicted by Gerber et al (2001), enormous human resources shortages are envisaged in the skilled sectors. The problem is so acute that not even efforts of hiring immigrants like in the medical profession has or will solve this problem. Educational institutions and human resource managers must take note of these trends now so that they can make the necessary adjustments in their human resources plans. Barker (1999) discovered that there has been a rapid increase in high-level personnel. Those with at least two years of education & training after Grade 12 have increased from 9 % of non-agricultural employment in 1985 to 21 % in 1994.

However, some authors such as van Dyk et al (1997) are of the opinion that labour shortages in certain skilled occupations are likely to place a ceiling on economic growth development in South Africa. Positive development activities involving the media in education, and computer-based training will help improve the skill levels of the South African labour force. This is particularly important because the technological development renders traditional tasks superfluous. Training should therefore take place continuously throughout the career of employees in organisations. Focus should also be put especially on new technology, equipment, supervisors in leadership; negotiation and participatory planning methods.

As mentioned in chapter two, South Africa is experiencing an acute shortage of skilled workers as a result of rapid growth during the past two decades and restrictive labour legislation, which in the past, placed an enormous strain on the economy as a whole. This shortage has resulted in reduced productivity because there are not enough skilled employees to cope with management tasks. South Africa is functioning at present with only 9 % of the economically active population being highly skilled, while the figure for First World continues is 33 %. Where managerial staff are concerned, the figure for South Africa is 2 % as against 7% for First World countries. Efforts should be put in place to train as many employees as possible and prepare them for future jobs. Training programmes should be designed in a way that will meet both the organisations' goals as well as the individual goals so that employees are retained and experience the benefits of the training process. The experience of self-improvement is a motivating factor.

3.3 Factors that have an impact in the formation of training legislation in South Africa

For any organisation to be successful and to yield necessary returns, it requires education and training policies that are shaped within the prevailing macro-social and economic circumstances as well as the national strategic vision of the country. Below are some of the macro-issues that impact directly or indirectly on the formation of training policies.

Firstly, the new world economy has an impact on the formation of South Africa's training policies. According to Gerber et al (2001), the new world economic environment is

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changing the structure of labour markets by increasing the level of competitiveness and thereby, creating a need for improved labour productivity and a more flexible workforce. In this environment of rapid change, organisations, require more education and training so as to meet the demand for the highly multi-skilled persons and technical staff needed to manage the new social and economic challenges. South African organisations should develop policies that will allow their employees to go for any type of training and development that will enhance the organisations' productivity. Organisations could give time-off to its employees for such purposes. Employees should also look at themselves as entities that contribute to the countries economy, and therefore should be very competitive locally and if possible internationally.

Secondly, the changing working world is another factor that South African organisations need to look at when developing training policies. The impact of economic, technological, social and political factors is transforming world markets fundamentally. Erasmus and van Dyk (1996) point out that the movement of technology, goods capital, the location of production and, to a lesser extent, labour across national boarders is leading to the rapid globalisation of the world economy. All this leads to the national economies becoming interdependent and integrated. The liberalisation of trade, its development and universal availability of rapidly evolving information technology are among the major driving forces behind the globalisation of the economy. International trade has eventually become more market-orientated as a result of deregulation and the transition of former socialist economies to market economies. Labour markets, in the process, are being restructured to meet the challenge of being highly competitive, thereby

creating a need for increased productivity and continuous innovation in the business environment. This leads in turn to restructuring, privatisation, the relocation of production, the redeployment of workers and change in job content, work process and organization which eventually affects skill requirements.

Thirdly, labour productivity and flexibility of the workforce in South Africa are two factors that have become increasingly significant for the country to expand its economies and to improve the welfare of its citizen in a competitive and changing world economy (Gerber et al, 2000). The higher a country's labour productivity and the more flexible its workforce, the better that country is able to acquire and adapt the technology needed to produce better quality goods and services, at lower costs, and to shift the structure of production to new markets and products (Olivier, 1998). The country's training policies should then be formulated in line with the level of productivity or flexibility of the workforce. The lesser the productivity levels the more the policies should put efforts to address the efficiency, thus, ensure an increase in productivity.

Productivity and flexibility according to Nel et al (2001) depends on the level of capital investment, the technology of production as well as quality of management. The above mentioned factors dependent on the skills of workers at all levels, from senior level to semi-skilled operators. Sound management alone is not enough for improved productivity and flexibility. Of equal importance is the competence of skilled workers and technicians who occupy the middle level of the workforce. In modern economies, these workers facilitate the adaptation and use of new technologies, enhance the

efficiency and quality of production and maintenance, supervise and train workers with lesser skills.

Another factor that is of importance is investment in training. According to Middleton et al (1993), results of much of the investment in skills training have been disappointing, due to various reasons. In South Africa, expectations regarding the power of training programmes, especially those aimed at young people making the transition from school to work, have been unrealistic, largely because of the slow growth in the skilled wage employment. In other cases, inefficient administration has reduced the returns in public training investments, and governments are not always mindful of economic policies that distort the incentives, to firms and individuals, to invest in skills. South African training legislation enforces organisations who make total remuneration payments of R250 000 per year to its employees to pay 1 % of their returns to the training budget or relevant Sectoral Education and Training Authority (SETA), which they can then reclaim, such funds. This influences organisation to set up policies that encourage their employees to study so that they, as organisations, can access those funds they have contributed to the national training board. It is also worth noting though that economically and socially disadvantaged citizens do not benefit from training unless the skills learned improve their productivity, employment or so to say they only benefit if such employees get employed and are able to use the skills they have acquired through those training interventions. In short, the effectiveness of investment in training is highly dependent on the nature of employment in society.

Other factors that influence the formation of training policies are economic and social policies, especially those regarding growth of the infrastructure. According to Dessler (2000) the nation's economic and social policies not only affect patterns of economic and employment growth, but also determine the market signals and incentives that guide, individuals, employers and trainers in making decisions about investments in training. He argues that policy makers should understand the relationship between the economic environment and the incentive structure for skills development that individuals and enterprises face. He further argues that policies are more effective if they are adapted to the nature of the economy, and are also effective if these policies evolve as the economy change.

Lastly, state intervention is another factor to be considered (Baird et al, 1983). The South African government plays a major role in the training market. This is vital because private training markets prove too limited in meeting the broad skills needs associated with economic development and growth. The focus of individuals and private organisations is on higher productivity, profits and wage earnings which come from training and which affect them directly. Government, on the other hand, representing society at large, is likely to capture the largest share in tax from a flexible and competitive economy, which may accrue from a better-trained workforce. Secondly, there is the issue of social equity. Public subsidisation on equity grounds for the disadvantaged, women, and marginalised youth is justified provided it is carefully targeted to ensure that only those in need benefit (Middleton et al, 1993).

3.4 Policy environment influencing skills development in South Africa

Firstly, the South African government has an enormous task of developing policies aimed at the promotion of economic growth and social development. Political stability, a policy that encourages economic growth largely through private initiative, fiscal discipline, exposure to foreign competition and sound labour relations are seen by experts as prerequisites for sustainable growth and for tackling the problems associated with unemployment, poverty and socioeconomic backlogs. Nel et al (2001) call for a sustained effort by all policy makers in government to promote education and training, and job creation through national public works programmes. Reconstruction and development in South Africa is currently high on the national agenda and is seen as a process of empowerment through which each and every citizen is entitled to active participation in the economy, not only to help create wealth and prosperity, but also to share its fruits.

Human resources development is the other initiative, which has forced South African industries, to remain competitive. South Africa is faced with a challenge not only of developing its people in order to allow them make a meaningful contribution towards economic growth and eventually wealth creation, but also allowing them to share in the wealth created by participating in the economy. The country therefore needs people with rising levels of applied competencies and not just general capabilities if they want to compete globally in the complex and changing economy (van Dyk et al, 1997).

According to Nel et al (2001) one of the critical issues facing the tertiary education sector is a need for models linking information and dynamics pertaining to tertiary education with statistics and trends relating to the workforce, especially to the demand for and supply of, skilled human resources. The foundation for Research and Development (1996:28) found that South Africa produces too few students with technical and career-orientated qualifications, relative to other university qualifications. More efforts should be put to increase the number of qualified students in technical subjects for the country to increase its productivity. Companies could invest in special programmes or bursaries that could encourage students to enroll in these courses. Tertiary institutions must publicise the availability of these courses as well as the career-opportunities that go with studying such courses.

3.5 The birth of the South African Training legislation

The training system in South Africa, as in many other countries is receiving severe criticism for lacking relevance to market demands. van Dyk et al (1997) states that it is a universal problem of training systems of most developing countries to be trapped in tradition and bureaucracy and unable to respond to rapidly changing labour markets. The South African government is faced with an enormous challenge of balancing, on the one hand the demand for a skilled and flexible labour force to make industries in the country more competitive and, on the other hand of ensuring equal access for all citizens to training opportunities, as well as redressing disadvantages faced by particular groups. To influence the training system and bring about the necessary changes to meet new

challenges, the state is compelled to take the lead in developing policy that is supportive of the economic and social changes the country is facing.

South African training legislation went through different stages, each being characterised by the political climate of the day. Prior to 1981, the training legislation that existed prohibited Blacks to be included in the training programmes. For the sake of this discussion and as defined by the Employment Equity Act 55 of 1998, Black refers to Africans, Coloureds and Indians. Arising from Wiehahn Commissions Report (1981), in which it recommended that industrial relations be de-racialised, the Manpower Training Act was then passed in 1981. For the first time, training legislation did not refer to racial categories and all race groups were included in training programmes. The Manpower Training Act (1981) also introduced a tripartite forum namely, the National Training Board which was established to advise the relevant Minister on training matters. Then 1991 was the amendment of the Act which then made provision for the establishment of Industry Training Boards (ITBs). These boards were established to be responsible for the training of all workers to manage apprenticeships (which also in earlier legislation where blacks were excluded in these programmes and trade testing in their respective industries). The current training legislation was then laid by the work of a representative Task Team of under auspices of the then National Training Board with business, trade unions, the state and providers of education and training as the main stakeholders. The Task team compiled a report, which helped in the development of three pieces of training legislation namely Skills Development Act 97 of 1998, Skills Development Levies Act, and the South African Qualification Act.

The Skills Development Act 97 (1998), provide for an institutional framework to devise and implement national sector and workplace strategies to develop and improve the skills of the South African workforce. The Act seeks to develop the skills of the South African workforce and thereby increase the quality of working life for workers, improve the productivity of the workplace, promote self-employment and improve the delivery of social services (Republic of South Africa, 1998). In addition to this, the Act also seeks to encourage employers to use the workplace as an active learning environment to provide work experience. The Act also regulates employment services. The Act further focuses on the intention of improving employment prospects of previously disadvantaged persons through education and training to help work-seekers find work, retrenched workers re-enter the labour market and employers to find qualified employees.

The objectives of this Act are to be achieved by establishing a stronger institutional and financial framework than the one that existed under the Manpower Training Act. The existence of this Act saw the National Training Board being replaced by a National Skills Authority (NSA), which is an advising body to the Minister of Labour. This body ensures that national skills development strategies, plans, priorities and targets are set and adhered to. ITBs, were also replaced by Sector Education and Training Authorities (SETAs), which are responsible for developing sector skills plans, which are aligned to the National Skills strategies and targets. These sector skills plans are then presented to the National Skills Authority and approved by the Minister of Labour. These skills plans are also the ones that most organisations use including the one understudy.

The second legislation is the Skills Development Levies Act (SDLA). The Act provide for the imposition of a skills development levy. A national levy scheme for skills development is premised on the assumption that effective skills formation requires a strong link between occupationally based education and training, and the workplace. The Act provides a regulatory framework to address the current low levels of investment to training by firms. It establishes a compulsory levy scheme to organisations whose their total remuneration to their employees is over R250 000 a year. The levy is used for funding education and training (Republic of South Africa, 1999).

The main objective of the Act is to introduce a levy of employers' payroll per month (equivalent to 0.5 % of an employers' payroll per month) with effect from 1 April 2000, and 1% with effect from 1st April 2001. Employers must pay the levy to the Commissioner for the South African Revenue Service (SARS). 20 % of the funds collected will be allocated to the National Skills Fund to finance national skills priorities. The remaining 8 % of the levies must be paid into the bank accounts of the various SETAs to find the performance of their function and to pay for their administration within the prescribed limit.

Lastly, the South African Qualifications Act 58 (1995) provides for a comprehensive national recognition framework consisting of national standards to improve the quality and relevance of training. The Act also provides for the development and implementation of a National Qualifications Framework (NQF). The NQF facilitates greater access to

learning opportunities for all South Africans and removes constraints to entry and progression within the learning system (Republic of South Africa, 1995).

3.5.1 Suggested training policy options for South Africa

South Africa's economic challenges will come from a competitive global economy. The quality of South Africa's human resources is a cardinal factor in achieving a competitive global economy requiring a world-class workforce, and building a democratic, non-racial, non-sexist future. Excellent opportunities are available to create a policy environment, which can direct the country towards becoming a developed nation within the next generation. Various strategic options are suggested by Nel et al (2001) that might contribute towards producing human resources, which will support growth and development and are discussed below:

Policy Option 1:   **Align human resources development policies with economic and social development policies**

Nel et al (2001) suggests that education and training systems should be sensitive to skills requirements, that education and training initiatives should be supportive to business activity, and that South African industries should be competitive. As indicated above, legislation enforces industries with a total annual output above a certain bracket to pay a training levy to relevant SETAs, whereby they can reclaim such a levy and finance its training programmes. With such training policy, the country will benefit in a sense that industries will be encouraged to train its human resources and therefore remain competitive at national and international levels.

Policy Option 2:   Institute measures to correct the enrolment ratio between

universities and career institutions

This option proposes that education institutions should contribute to the envisaged needs

of the economy, and should assist with improving the science and engineering workforce

both quantitatively and qualitatively. This option helps the state to identify areas (fields)

where the country as a whole lacks in terms of skills. It then introduces incentives for

example bursaries or scholarships to encourage learners to enroll in those fields that the

country is lacking for example science fields. With this option, the country will

experience an increase in enrolments, in universities or institutions in those identified

areas. The country will then continue to try and meet the demand in the skills needed.

Policy Option 3:   Install strategies and partnerships between the state and

organisation, based on mutual trust, co-determination, and

sharing of responsibility.

Areas within which collaboration should take place are in the field of training policy

development, financing from new sources and incentives for investment in training,

delivery of services offered by public training institutions, and assisting entrepreneurs

with skills development. As mentioned earlier, the existence of SDLA and SDA has

enforced industries to formulate training policies that are in line with these two

legislation. The country has benefited from such initiatives by industries because if

training policies of industries are developed in line with the national policies, then the

national objectives will also be met. Private enterprises therefore benefit if they develop

policies that are aligned to the national interests which are also similar to their own interests. The option also suggests that the introduction of incentives for investment in training encourages voluntary initiatives and the joint management of funds by social partners has helped or encouraged more training investments in companies. Lastly, the delivery of services, has also encouraged a lot of industries to train its human resources so that their employees are more efficient or productive. Industries realise that the more they train the more they produce, and the more efficient they become, thereby increase their training initiatives. Also for them to compete at any level with other industries the best solution is to have fully trained staff who produce using the new methods or new machines

Policy Option 4: Establish a world class education system

This policy option will support the requirements of employers by instilling a learning culture and sense of discipline, providing for basic learning needs, responding to economic needs and dispensing desired knowledge understanding and attitudes. This option emphasizes that if industries or the country want to prosper they must instill a culture of learning, thus, institutions or individuals must understand the benefits that come with training or learning in terms of production improvement. Also there must be a direct approach to training methods or programme. All training programmes should therefore aim at improving the production levels of employees, thus after training, employees should be able to work better or produce more. Industries should also develop its employees based on their needs or gaps identified. It should develop in a way that they keep up with the technological development of its industry, if there is new

equipment, employees should be sent for training so that they could work with the new equipment and no disruptions in terms of work performance.

Policy Option 5: Revitalise the current Vocational Education and Training system

This should be done so that it can respond quickly to changing needs, provide an interface between general education and the working world, as well as create opportunities for continuous upgrading of skills. A dynamic Vocational Education and Training (VET) system is also regarded as the decisive factor determining the competitive strength of South Africa's economy. Gerber et al (2001) suggests that VET system should be based on the following principles;

(a) The system should be based on sound initial education, that is to say, employers and training providers expect trainees to have basic literacy and numeracy skills so that they react positively to education and training programmes;

(b) The system should be able to respond quickly to market demands. Experience has proved that VET Systems that are mainly teacher –controlled tend to have a strong supply-driven. South African organisations should therefore involve social partners when designing and executing VET programmes if they want such programmes to be demand-driven systems.

(c) The system should be underpinned by a national qualifications structure; A qualifications structure should both serve as a mechanism to award a qualification at the end of a training programme as well as promote admission to courses that are already under way and make it easier for candidates to switch over to other education and training programmes if they so wish. Key factors: the labour

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market should also be involved in designing policy and training specifications, establishment of the notion of a co-responsibility for a skilled flexible workforce. This is essential for competitive industries;

(d) The system should also provide for a broad-to-specific approach. Training should start with vocational foundation training, which is the same as if learnerships. In the second stage learnerships within similar trades should be grouped together, before the training becomes highly specialized in the final stage.

(e) The system should also provide initial work-based training. This is because there is currently very little linkage to school-based vocational training. Consideration should then be given to bringing work-based training provided by enterprises into the ambit of the VET system.

(f) The system should also complement occupational skills with transferable like-skills. That is to say, emphasis should be placed on personal, social and methodological competencies. The ability of trained personnel to execute duties on his own should serve as guidance in the structuring of the training programme. Personal skills and social competencies are skills related to motivation, decision-making and ability to work in a team while abstract and logical reasoning as well as problem solving strategies are those that are termed as methodological competencies.

Policy Option 6:   Target the informal sector to intervention, through the use of

training to transfer knowledge, skills and attitudes

This policy option focuses on areas with potential for sustainable growth, real needs, problems of the informal sector, and the possible integration of training with other interventions. Training should be regarded as a means of job creation, and should also be based on knowledge of the population, their environment, as well their problems and aspirations. Training should be offered in response to market demands, and not as a social service.

Since the formal economy cannot generate sufficient employment for the expanding labour force in South Africa, training would help them survive in the informal sector. Having basic skills like literacy, numeracy and so forth would help an individual start up his or her own business for a living.

Policy option 7:   Training for the unemployed should be integrated into

active labour market policies by providing a link between

training and job placement, unemployment benefits and

growth industries.

Training for the unemployed as mentioned above should improve access to jobs, generate job related skills and foster productive labour markets. Such training should target and diversify training programmes based on assessment and involve key players at local level. The training of the unemployed is justified from a social equity point of view, as well as in terms of the governments' commitment to fight unemployment. Organisations

should therefore train people that live around their organisations or empower them with life-skills as a social obligation to the government of the day.

3.6 An overview of the macro-factors that affect training in South Africa.

Education and training of the labour force is a high priority within the South African labour dispensation. Training and education are two of the most important factors that will positively influence economic growth, political stability and social success. However, there are certain important macro-factors that can affect the training of employees in South Africa enterprises as discussed by Gerber et al (1996) which must be noted namely:

3.6.1. Population growth

Tables 1 below provide an estimate of South African population growth up to the year 2011. As indicated, there is an annual decrease in the population growth in all the population groups. In 1991 the total population amounted to approximately 37 million, and this figure will grow to approximately 53 million, by the year 2011. In 1996 Whites constituted approximately 12,5% of the population, while Asians, Coloureds and Blacks constituted, 2,5%, 8,4 % and 76,4% of the population respectively. The massive population increase set out in table 1, also mean that the number of pupils will increase proportionally over the years. This will call for an increase in the necessary infrastructure, such as schools, teachers, books and playing fields to accommodate the increasing population. Training efforts will have to be focused on the black population,

women and the disabled without neglecting the other population groups. Training programmes to manage diverse workforce in South Africa will have to focus on literacy, numeracy, life skills training conflict handling and supervisory skills for all groups but emphasizing on those groups (designated) that were previously disadvantaged.

Table 1 Population growth of the various population groups in South Africa

Population groups	1991	1996	2001	2006	2011
Whites	5 068 300	5 242 200	5 383 400	5 480 200	5 528 800
Asians	986 600	1 054 400	1 119 200	1 173 200	1 213 800
Coloureds	3 285 600	3 529 100	3 756 700	3 954 400	4 112 700
Blacks	28 396 700	31 954 700	35 750 000	39 497 300	42 998 900
Total Growth p.a*	37 75 10037 200	41 790 400	46 009 300	50 105 100	53 854 200

*per annum

Source: **National Training Board (1994:D2)**

3.6.2 Average Age

In 1985 the average age of whites was 29years and was estimated to increase to approximately 37 years by 2020. For blacks it was 18 years and was estimated to increase to approximately 23 years by 2020. The white population is, therefore, ageing due to improved diets and medical services while the other groups will display the same tendency as these benefits become more accessible to all. The implication for training is that training programmes needed to be developed with the focus on the adult learner and to create a culture of lifelong learning. This has to be established as soon as possible to ensure that older workers can adapt to changing external influences. The new workers on

the other hand, should be trained so that they are on par with the older workers and eventually take over from them and causing no disruptions in work.

3.6.3   Education levels

Table 2 shows the education levels of different population groups (between 20-64) as determined in 1999.   The table indicates that approximately 30% of the country's economically active population was illiterate, that is to say, with a standard 3 or lower qualifications, or without any schooling. Furthermore, 55% of the total population was illiterate compared to U.S.A. (13%) or Japan (1%) at that time. Recommendations were made that an estimated 6 million people were to undergo lower level adult education programmes to improve the educational levels of this country. The high cost of training and the basic facilities will have to be provided by the government through Reconstruction Development Programmes (RDP). The country's economy will have to grow at a minimum of 5% per year for the next 5years in order to accommodate these programmes. It is therefore pretty obvious that for South Africa to become a competitive nation, it is essential for it to increase the education levels by improving education and training. Again as clearly seen from the table the majority of Africans (Blacks, Asians and Coloureds) are illiterate, thus, suggesting that preference should be given to them first (priority) in terms of education and training, at the same time looking at women and the disabled who are also classified as designated groups in terms of the Employment Equity Act and Skills Development Act.

Table 2   Education levels of the various population groups for the age group 20
to 64 in 1991

Education level	Blacks	Coloureds	Asians	Whites	Total
a. None	2 264 229 22%	173 261 10%	27 977 5%	21 745 1%	2 487 212 16%
b. Ger. 1-Std 3	1 890 414 19%	230 661 14%	29 532 6%	7 437 <1%	2 158 044 14%
c.Unskilled (a+b)	4 154 643 41%	403 922 24%	57 509 11%	29 182 1%	4 654 256 30%
d. Std 4-5	1 698 184 17%	329 304 20%	52 134 10%	15 346 1%	2 094 968 14%
e. primary or less (c+d)	5 852 827 57%	733 226 44%	109 643 20%	44 528 2%	6 740 224 44%
f. Std 6-9	3 266 911 32%	716 968 43%	243 911 46%	994 038 33%	5 221 829 34%
g. Std 10	858 030 8%	158 678 10%	136 964 26%	1 181 042 40%	2 334 714 15%
h. Std 7-9+Dip	13 812 <1%	9 334 1%	2 490 1%	39 714 1%	65 350 <1%
i. Secondary or equivalent (g+h)	871 842 9%	168 012 10%	139 454 26%	1 220 756 41%	2 400 064 16%
j. Std 10+ Dip	168 942	42 150	22 996	398 963	633 051

	2%	3%	4,3%	13%	4%
k. B Degree or equivalent	29 029 <1%	12 831 10%	18 704 4%	283 029 10%	343 593 2%
m. M Degree	802 <1%	493 <1%	1 063 <1%	27 273 1%	29 631 <1%
n. D Degree	772 <1%	251 <1%	520 <1%	9 352 <1%	10 895 <1%
p. tertiary (i-m)	199 545 2%	55 725 3%	43 282 8%	718 617 24%	1 017 170 7%
0. Total (e+f+i+p)	101 991 125	1 673 931	536 291	2 977 939	15 379 286

< less than

'Source: Adapted from the National Training Board (1994:D10)

3.6.4   Unemployment

By 2001 it was estimated that eight to thirteen million people in South Africa are unemployed. Although there are no reliable statistics and therefore difficult to come to any definite conclusions. However, it is possible to make the following remarks:

- The majority of unemployed people in South Africa have had a low-level training of training and therefore have very limited skills. This is because the majority of this group lack funds and live in rural areas where they do not have access to the most of the training programmes designed for the informal sector.

- Most of the state funding for the unskilled people is channeled to regional training centres to finance at least 350 courses. Training is also provided by non-government organisations to private training centres.

- Much of this stems from the skewed distribution of education funds and work opportunities under the apartheid government.

3.6.4.1 Solutions to unemployment problems

Cumming (1985) proposes that the following solutions to unemployment which could be used in South Africa to eliminate or eradicate this problem;

- More job opportunities should be created where people could learn how to work productively; how to produce goods of high quality at lower cost.

- People should be trained with life-skills as well as provide more opportunities to create jobs for themselves with the informal sector.

- These investments must not come in the form of money, but more so in he form of the creation of industrial and commercial investments that will foster direct job creation. Foreign capital investment is essential for economic growth and job creation.

- Education and training should be presented with a view to self-employment and for careers for which there is a specific need.

- To this, the author would like to add that we need a visionary government that will involve private enterprise in infrastructure development projects.

3.6.5   The supply and demand for labour

By 1996, South Africa had a shortage of approximately 103 000 managers for executive and other managerial positions in South Africa, as well as a shortage of approximately 442 professional, technical and highly skilled people (Carrel et al, 1998). The current situation is hat lower-level skills, of approximately 500 personnel is required. It would seem, however, that there is a surplus of about 2.8 million people, who are unskilled. These include those who hold some education, between standard eight and ten. This, according to estimation, has increased between 2.8 million and 3.4 million by the year 2000. It has obviously created serious problems since school leavers have found themselves without jobs. Presently, there is also a shortage of approximately 5000 professionals that acquire lower-level skills, while there is an oversupply of approximately 2,8 million people who have no skills at all. A shortage of highly skilled workers was envisaged, but the shortage of graduates turned into a surplus. Also standard 8 to 10 leavers which according to estimated increased between 2,8 million and 3,4 million by the year 2002 and had created serious problems since school leavers found themselves without jobs. This situation only re-emphasises the view that here is need for a government that has foresight and vision to be able to involve the private enterprise to create appropriate jobs according to the required needs as observed on the previous page.

3.6.6.   Technological acceleration

Technology enables people to, among other things, see further, drive faster, hear better and communicate over longer distances than would have been possible in their natural

state (Alberts, 1998). Technology makes possible for people to provide clothing, food, shelter, and other sophisticated services and products.

Alberts (1998) also contends that training is the instrument through which knowledge to implement technology is conveyed. Technological innovation increases the importance of training, for not only must new entrants into the market be trained, but technological change also necessitates continuous retraining. Generally speaking, South Africa has sufficient unskilled labour, energy and mineral resources at its disposal, while there is a shortage of capital, trained workers and technology.

3. 7 Funding of Training

Traditionally, trainees used to pay for their own training but the South African government has always believed that employers are responsible for funding the training of their employees, while government should be responsible for the funding of education.

Erasmus et al (1996) suggest that training is an investment in human capital, and it should be a key part of enterprises' human resources development strategy, and should be strengthened by national economic and training policies. He also says that the Manpower Training Act for example, provides for industries to establish a training levy scheme. He further states that, while more policy should be put in place which will place an obligation on employers to train, employers should at the same time be encouraged to contribute to the national workforce. The existing legislation, for example the Skills Development Levies Act 9 (1998), enforces organisations who spend R250 000 and over

on employees' salaries per year to pay 1 % of the total payroll to South African Revenue Services where such money can be claimed for training through a relevant SETA, failure of which such organisations lose this money. The Act also punishes those who fail to comply with this provision, thereby encourages employers to spend on training. Organisations also regard training as both an investment and a cost which must be measured against potential profitability and productivity gains before deciding to go ahead with it.

3.8 Cost and benefit of training and development

The cost and benefit as described in Chapter Two of training applies to individuals, organisations and the government. For individuals, training is at a cost of lower earnings, but could also be regarded as an investment, in the sense of higher future earnings, career opportunities, and personal fulfillment. Resources used for schooling and training yield net benefits of greater value than alternatives. Organisations on the other hand, perceive training as an investment as mentioned earlier, but also a cost, which must be measured against potential profitability and quality gains. For organisations to invest a lot in training, that training should offer a greater productivity improvement than alternative uses of those resources for example capital investments. Erasmus et al (1996) suggest that like any other form of investment training can only be seen as a net contributor to improved efficiency if such training leads to an enhancement in an enterprise's performance and should outweigh its costs. Its almost entirely up to the managements discretion after calculating the costs and benefit that goes with training to decide whether they should still spend on training or not.

The South African government as in other developing countries is faced with pressures to stabilize spending on social programmes, including education and training. Gerber et all (2001) suggest that government should fund training because it also benefits from the results of the training investment where the benefits of higher productivity, profits, and wage earnings affect them directly. Public subsidisation of training, on equity grounds for the disadvantaged women, and marginalised youth is justified because it makes more people eligible to earn heir own income and therefore not be dependent upon state subsidies.

3.9 Sources and application of training funds

Funds allocated for training usually originate from the government enterprises, individuals and donors, and are applied in the areas of regulation and quality assurance, training of employees, the unemployed persons and pre-employed programmes. Government is mainly involved through the technical college system where it invests through loan schemes, bursaries or scholarships to outstanding students or students that are from poor backgrounds or the disadvantaged areas (Erasmus, 1996).

Nel et al (2001) also point out that other ways in which government could assist is through tax credits for approved training, industry incentives that they may get if they train a lot, grants for training innovation and infrastructure. The government may also offset interest rates on loans so that more organisations or employees can get loans to finance training.

Apart from the government, organisations could also help in the funding of training. Organisations could fund organisation-specific training that are designed to develop job-related skills and competence, or unstructured on-the-job training (van Dyk, 1997). Organisations could also find industry-specific training that could be funded through either sectoral payroll levy schemes or through a nationally levy scheme.

According to Blanchard and Thacker (2003) individuals could also to some extent, fund their own training. This could happen through the fees they pay to training providers or through loans given that have to be repaid, as well as indirect contributions that could be made through the acceptance of lower income during the period of training.

Goldstein and Ford (1998) suggest that training could also be funded by donors. This translates into saying tat if the funding allocated is not subjected to strict control, it might easily end up funding other non-training projects.

Other alternatives for generating training funds are general taxation, which is mainly utilised for the training of the unemployed and less utilized for funding of training for the employed. A levy on payroll or turnover is another alternative. The principle that those who benefit should be those who pay implies that the financing of entry-level training and skills upgrading for the employer should come from employers and the workers themselves. Nel et al (2001) make mention of three types of levy systems namely *levy-exemption, levy-grant system* and *levy income.* Levy-exemptions, allow organisations to prove that they have paid for approved training and avoid paying the levy, while levy-

grant system require the payments of levies, but funds maybe reclaimed to pay the cost of approved forms of training. Levy income on the other hand, is turned over to state-recognized organisations to provide training (labour and business is usually part of the governance structure of these organisations). Private expenditure is the last alternative for generating training which will be discussed in this chapter. Government can therefore intervene, via the tax system by introducing tax exemptions or credits for enterprise's and individuals' training expenditure. However, for small enterprises and low-income populations, cash transfers in form of tax rebates are more effective instruments for expanding private spending on skills training. Other alternatives include vouchers that entitle individuals to purchase approved training, or loans that are either subsidized or not.

3.10   South African Levy-grant scheme

Given a lot of options the South African government opted for the levy-grant scheme and introduced the Skills Development Levies Act 9 (1999) to support this scheme. The Act introduced a compulsory levy scheme for the purpose of funding education and training, as envisaged in the Skills Development Act. The government decided on the levy grant scheme because it was easier to monitor and the levy-grant relationship establishes a closer link between the cost and benefit of training. The government chose the levy grant because the scheme also provides some benefits;

Nel et al (2001) remark that the grant scheme alleviates the free-rider problem in a sense that all organisations contribute to the cost of training. The scheme improves collection

efficiency because the levy is collected by the SARS and this improves the compliance and also reduces the administrative costs of collection. Furthermore, the system tries to balance development and equity. The levy scheme also serves as a mechanism to redeploy resources consistent with economic needs. Thus, training resources are shifted to sectors that are targeted for development. The scheme then in the process redistributes training resources within certain established parameters in response to strategic development needs and social equity.

The scheme also allocates revenue to address social equity needs, that is to say, it allows for the training of unemployed persons, groups in the informal sector, as well as allocates revenue for the purpose of social equity.

The other thing that the scheme does is that it promotes training effectiveness and efficiency. Resources, on the demand side of the labour market, can be assembled to promote effectiveness and efficiency from training providers in the market system. Grants are also linked to the National Qualifications Framework (NQF), which then allows for the remuneration of outcomes, in the form of skills acquisition, rather than focusing on the cost of training inputs.

In addition to this Nel et al (2001) support the scheme because it ensures multipartite participation, in a sense that, the scheme develops a culture amongst employers and workers of accepting the necessary accountability for the productive utilization of training funds. The scheme emphasizes competitive procurement. Training grants are

awarded to providers on a competitive basis. Training is therefore moved from a supply-driven to a demand-driven system.

Lastly, according to van Dyk et al (1997) the same scheme also promotes proper monitoring and evaluation is carried out. The levy-grant scheme has a potential to establish monitorable performance indicators to evaluate the performance of the various role-players in the system. The scheme also ensures core levels of training in that, the scheme serves as a platform for revenue allocated to training as well as an active labour market policy, that enables the provision of core level training, consistent with the skill requirements of the labour market. It locates training funds directly with the main beneficiaries, namely the employers and unions. The levy further requires employers to consider their training needs more seriously, and provides to offer training that meets the needs of the workplace.

3.11. Conclusion

Skills development through education and training is described by Nel et al (2001) as one of the most powerful tools for improving both individual opportunity and institutional competitiveness of countries. The South African government and employers have also recognized the critical role a skilled and knowledgeable workforce can play in securing competitive advantages in the international markets. It is therefore for this reason that this chapter emphasized that the quality of organisations' human resources is also the determining factor in their continuing progress and prosperity.

Chapter Four

RESEARCH METHODOLOGY

4. 1 Introduction

The study focuses on the impact of training and development in an industry called PORTO, through a method called Appreciative Inquiry (AI). AI covers both action research and organisational development (Bushe, 1995). The method focuses on assessing positive dimensions of an organizations' culture, at the same time it provides qualitative data that could help managers and administrators to reform elements of certain programmes (Reed, Pearson, Douglas, Swinboorne & Wilding, 2001). In this instance the findings of this research will help managers to look at the areas that are important in terms of training and development, or areas that need improvement.

According to Coperrider & Srivasta (1997), there are four basic principles that one should take into consideration when dealing with Appreciative Inquiry. They suggest that research should begin with appreciation, in a sense that it should be applicable in terms of the findings, and the results should help make decisions that would be implemented. The authors also suggest that research should be provocative and researchable. Besides, it should spark some interests in terms of one trying to get the answers, thereby driving that person to do such a research. Lastly, the research should be collaborative, in the sense that it is well planned and organised and information is easy to collect. The above-

mentioned principles translate into a process of inquiry. Bushe (1995) specifies that the project of assessing, *'what is'*, should then through exercises in vision and logic collaboratively articulate *'what might be,'* developing consensus and obtaining the consent of those in the system to *'what should be,'* and collectively experimenting with *'what can be.'*

Appreciative Inquiry was chosen as a method for this study over other methods because it can be conducted with a large number of people in any organisation.

The method differs from other evaluative approaches in that the focus is on changing social systems, in an attempt to generate a collective image of a new and better future by exploring the best of what is and has been (Bushe, 1995). The method of choice was both qualitative and quantitative. Qualitative research attempts to understand people in terms of their meaning of the world. In this case, the research attempts to do so by finding out what the trainees' opinions of the organisations' programmes are and, at the same time, find out some of the issues the organization is involved in with regard to training. Quantitatively the study attempts to get gather information of the numbers involved in these training programmes, the pass and failure rates in a four year period as well as the total expenditure of the training programmes

4.2 Population Sample

The target population in this project comprised employees of PORTO. The method used to select the sample was simple random probability sampling. This method was chosen

over other methods because it ensures that every subject has an equal chance of being selected as part of the sample. This research involved 9 trainers (1 from each of the training methods) and 34 trainees (at least 4 from each of the training programmes). The training programmes as identified comprised; ABET (Adult Basic Education Training), Management and Supervisory training, Learnership Training, In-service Training, Technical Training, Marine Training, First Aid and Safety Training, Induction Training as well as Bursary Scheme employee's training. The study also used another questionnaire to gather information with regard to the industry's training programmes and past statistics of the trained employees filled in by the training manager. He gave an overall opinion as an accounting officer on whether he thought training has an impact, problems they have with regard to training and their future plans of improving these programmes to improve productivity.

The training manager was the coordinator in terms of evaluating these programmes. He gave permission for the study. To gain access to the sample (participants) the researcher had a meeting with the Training Manager, explained to him about the aim of the study, the participants identified and the processes involved. Participants were informed through their supervisors and assured that all their answers will be treated with the highest confidentiality. They were also likewise informed of the purpose of the study. Furthermore, participants were informed that they would participate at their own will and if they felt uncomfortable they could say so. The researcher also assured all participants regarding anonymity, privacy and confidentiality and safety of the information they would be asked to provide. A copy of the completed research report would be provided

to the participants on request to assure them that all the questions asked were strictly for research purposes.

4.3 Instruments and procedure of collecting data.

The researcher use the following instruments, and procedures in collecting data

4.3.1   Data collecting methods

The survey method was used in this research. Thus, face-to-face structured interviews were conducted to find out about people's opinions, problems, attitudes, influences and personal views of the employees and employers on the topic under study. Where it was not possible, like for some trainers who were far, telephonic interviews were used, and in some cases interviews were used by supervisors to collect information where the researcher could not do so.

A structured questionnaire was used to collect all the information from participants. Responses from each individual were recorded separately and original copies of these questionnaires were kept. English was used as the preferred language of business at the most, but where not possible, translations were done during interviews, but all responses were recorded in English for easy comparisons of findings. The structured questionnaire was then used to determine the frequency of certain answers and to find out the relationships that exist between different variables.

Structured questionnaires were used to tease out information intended in this research. Structured questionnaires were chosen so that easy comparisons were done when data was collected. Each participant was asked the same questions. The questionnaire constituted a valid measure of theoretical concepts in this study. This was an effort to find common ground that gives an overall picture of what issues should be considered with regard to training and development, particularly when it came to participants' opinions on the training programmes offered by PORTO.

It was also envisaged that the questionnaires would be based on issues or possible factors regarded as important to the study as supported by the literature reviews in Chapter Two (Literature review on Training, Development and Production) and Three (Theory of training and development as it applies to the South African context). The literature review and a few interviews with the training manager as well as some participants, prior to designing the questionnaire, made the task a lot easier. The quality of the questionnaire was further improved through circulation for comment among friends, for example the Department of Economics, Psychology and Industrial Psychology at the University of Zululand.

In collecting data, face-to-face interviews were conducted using the above-mentioned structure by their supervisors or the researcher depending on how comfortable each participant felt when he or she was being interviewed by any of the above-mentioned data collectors. Face-to-face interviews using structured questionnaires were found to be an appropriate combination method because of the reasons stated above. At the same time,

Bryman, (2000) argues that face-to-face interviews has unique values compared to mailed questionnaire in a sense that interviews require a stimulus and confidential relations with the interviewee in order to provide personal and confidential information which participants can not ordinarily place on paper.

Bailey (1987) also feels that face-to-face interviews are better than mailed questionnaires because they offer some flexibility. Interviewers can probe more specific answers and questions can be repeated when the response indicate that the respondent misunderstood. The method also offers follow-up questions or clarity seeking questions if the responses are not clear or if the questions are not clear respectively. The other advantage that Hollway and Jefferson, (2000) singles out about face-to-face interviews, supported by this research, is that in most cases people are more confident when they speak than when they write. This could also be because of the language used or the extent to which the questions are clear. Non-verbal behaviour through interviews could also be observed easily as well as the validity of some of the respondent's answers could be determined. Good (1963) agrees with both of the authors mentioned above that face-to-face interviews are good because the researcher can standardize or adjust to the interview environment as well. Bryman and Burgess (1997) on the other hand, feel that face-to-face interviews should be used because it ensures that all questions are answered rather than those that are mailed. Some respondents may not respond to all the questions, and this may consume a lot of time because it might mean that questionnaires might have to be returned for completion.

Although, interviews have some advantages, which have been mentioned above, the method also has its own shortcomings. Firstly, interviews according to Isaac and Michael (1995) are costly and time consuming. The researcher may be living far from the research point and will have to travel (spend money), and also take a lot of his time since participants are interviewed one at a time, while mailed questionnaires save time because the researcher does not travel nor spend time on each respondent.

Behr, (1998) mentions that interviews are also not good because they are inconvenient; their success mostly depends on the researcher's willingness to report and his ability to report and record accurately. Isaac and Michael (1995) also think that there is less assurance of anonymity of the respondents because they are interviewed face-to-face. Some respondents feel like these researchers are spying on them. Despite, these disadvantages the researcher still felt that a combination of a structured questionnaire and face to face-interviews was the best because the method eliminates most of the problems encountered by each one of these methods.

The other technique which was used in collecting data included data from secondary sources which largely comprised of the industry's records, brochures, journals, interviews and other related publications.

4.3.2 Analysis of data collected

The collected data as indicated in earlier paragraphs is both quantitative and qualitative and was recorded in tables, figures or charts where necessary. Quantitative data

comprised of output figures in terms of how many employees have been trained over the years, and was collected using Questionnaire B. On the other hand qualitative data was largely comprised of data which indicated opinions, problems and other views of the targeted population regarding the topic.

Through the analysis of figures and opinions, one is able to see whether the training programmes are effective and expanding. Different views that were expressed will help in identifying problems on issues relating to training. The views or opinions also help find out the real impact of training on these employees and the production process itself.

4.4 Conclusion

The methods used in this research in collecting data proved to be effective and in areas where information proved to be difficult to collect, other tactics were used. Structured questionnaires proved to be very fruitful especially where there were face-to-face interviews. Where respondents were too busy for interviews, respondents were asked to fill in these forms with the help of their supervisor. Also telephonic interviews were conducted where the respondents were too far. Examples of the questionnaires are attached as an addendum. (see pages 154-160 of this dissertation).

The chapter that follows (Chapter Five) probes into the presentation of data collected using the methods mentioned in this chapter. The chapter further analyses the data that was collected.

Chapter Five

PRESENTATION OF DATA AND ANALYSIS

5.1 Introduction

This chapter focuses on the presentation, interpretation and analysis of the data collected

or gathered from respondents using the methods discussed in chapter four. The chapter

includes quantitative data that have been analysed statistically and examined using

thematic analyses to consider the responses to questions, which were asked as well as

qualitative data that have been interpreted and analysed descriptively.

In the results that follow, descriptive and inferential analysis of trainees' and trainers'

responses is presented. Firstly, the results will be presented for trainees and secondly for

trainers. The trainees' skill level, their ratings and opinions on training programmes and

also their opinion on how these programmes could be improved follow. This was

analysed within the organisation using themes from qualitative Appreciative Inquiry (AI).

5.2 Findings for trainees

5.2.1. Age distribution of trainee respondents

Table 3. Age

Age	Frequency	Percentage (%)
Below 20	-	-
21-30	13	38
31-40	10	29
41-50	11	33
Above 50	-	-
Total	34	100

From the table above it is observed that a considerable number of trainees were of the age 21-30, followed by ages 41-50. This clearly reflects organisational needs to train the younger and middle age generation so that the required work skill can be sustained for a longer period rather than training the older employees who are about to retire.

The figures could, on the other hand, be misleading because although the sample itself is representative of the population, the figures could be showing more on certain age groups because of the number of enrolments within the registered training type. Ideally, the lower the age the better investment it is to train such employees. The lower enrolments of the lower age (below 20) could be related to the fact that the lower ages are unemployable ages.

5.2.2 Gender distribution of trainee respondents

Table 4. Gender

Gender	Frequency	Percentage (%)
Males	19	56
Females	15	44
Total	34	100

The study indicates that there were more males than females on the training programmes sampled. This again does not necessarily mean that there are more males than females in the organisation. Skill surveys should be made to determine the numbers and representativity in these programmes. Efforts should, therefore, be made to prioritise the groups that are underrepresented. Thus, if for arguments sake, there are 60% women in the organisation, the same percentage of women must be represented in the training programmes.

5.2.3 Home language spoken by trainee respondents

Table 5. Home language

Age	Frequency	Percentage (%)
Afrikaans	3	9
English	3	9
Sotho	1	3
Venda	1	3
Zulu	26	76
	34	100

The figures in Table 5 above indicate that the majority of the respondents use Zulu as a

home language. This becomes evidently important because the same respondents later on

express their opinions with regard to the use of the language in which training is

conducted.

Afrikaans and English came second in terms of respondents' home languages, and there

was a negligible number who used Sotho and Venda as their home language.

5.2.4 Type of training programmes for trainee respondents

Table 6. Type of training programmes

Training programme	Frequency	Percentage (%)	Training period
In-service	6	18	253
Computer Training	3	9	38
Learnership	4	11	253
Bursary Scheme	3	9	483
Management & Supervisory	6	18	229
First Aid & Safety	1	3	7
ABET	1	3	305
Induction	2	5	5
Technical	7	21	5
Marine Training	1	3	90
Total	34	100	

5.2.5 Distribution of occupation type of the trainee respondents

Table 7. Occupation type

Occupation	Frequency	Percentage (%)
Student	9	26
Network Analyst	2	6
Financial officer	3	9
Cargo coordinator	3	9
Training officer	1	3
Operations supervisor	2	6
Driver	5	15
Secretary	7	20
Trade worker	2	6
Total	**34**	**100**

5.2.6 Trainees' rating of the training programmes

Question 1a

Respondents were asked to rate the training programmes in terms of their experience with them. The programmes were rated on the following scale:
0=unsatisfactory, 1=unsatisfactory at times, 2= satisfactory, 3= good, 4-=excellent

Scoring Key
Average of 4 means that experience and the level of training was excellent.
Average of 2 means that experience and the level of skill was satisfactory
Any average below 2 means that experience and the level of skill was not satisfactory

Total score of 4 means absolutely positive per person and 34 respondents therefore translates to a score of 34x4=136
Total score of 2 means average per person and 34 respondents therefore translates to a score of 34x2=68
Total score of 0 means absolutely negative per person and for 34 respondents therefore translates to a score of 34x0=0

The responses were recorded in table 8 below

5.2.6.1 Trainees' experience of the training programme

Table 8 Trainee's experience of training (Question 1a)

	Respondents	Total scores
0-unsatisfactory	-	-
1-unsatisfactory at times	-	-
2-Satisfactory	4	8
3-good	8	24
4-excellent	22	88
Total Scores	-	**120**
Average Scores	-	**3.5**

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Table 8 above indicates that most respondents had the opinion that their experience of the training programmes was satisfactory or excellent. This is evidenced in this table where the results indicate that at least, the majority of trainees responded that the programme was excellent (22 out of the 34 respondents). Less responded that the programme was good, while even less indicated that it was satisfactory. The results then confirm that the programme was at no point unsatisfactory or even unsatisfactory at times, because none of the respondents expressed that opinion, as far as their experiences of the training programmes were concerned. In discussing with them, respondents confirmed that most of the programmes were neither unsatisfactory nor none satisfactory at times and felt that the programmes were generally well designed for their specific needs.

5.2.6.2 Trainees' skill level ratings

Question 1b

Trainees were asked to rate their skill after training on the following scale:
0-unsatisfactory, 1- unsatisfactory at times, 2- satisfactory, 3- good, 4- excellent

Scoring Key
Average of 4 means that their skill after training was excellent.
Average of 2 means that their skill after training was satisfactory
Any average below 2 means that their skill after training was not satisfactory

Total score of 4 means absolutely positive per person and 34 respondents therefore translates to a score of 34x4=136
Total score of 2 means average per person and 34 respondents therefore translates to a score of 34x2=68
Total score of 0 means absolutely negative per person and for 34 respondents therefore translates to a score of 34x0=0

The responses were recorded in table 9 below:

Table 9 Trainees' skill level rating

Response	Males		Females	
	Total respondents	Total scores	Total respondents	Total scores
0-unsatisfactory	-	-	-	-
1-unsatisfactory at times	-	-	-	-
2-satisfactory	2	4	1	2
3-good	4	12	9	27
4-excellent	13	52	5	20
Total	19	68	15	49
Average	-	3.5	-	3.2

Table 9 indicates that all the respondents had the opinion that training improved their level of skill. More than half perceived themselves to have benefited from the training excellently, while the rest perceived to have benefited from the training fairly good or satisfactorily.

The table also indicates that proportionally, more men (13 of them) reported that they felt that training had increased their skill level excellently than women (54). Most women, on the other hand, felt that the level of skill gained was just good. The reasons for such a gap in opinions differently expressed by male and female respondents varied from the fact naturally men felt that they were more confident to implement what they had learnt because they were brought up as leaders of superior to women as compared to women who grew up to be told they were followers or inferior to men. The other reason was that there were more men than women in that industry which might also have caused the difference. Although efforts were made to ensure that the same number of women and men were interviewed more men were available for such interviews compared to that of women. Also in general most men had better educational backgrounds and experience

compared to women thereby making it easier for them to grasp most concepts and skills than their counterparts.

5.2.6.3 Trainees' opinions of the training programmes

The respondents were asked to give their opinion with regard to the following statements (Question 6) by placing a cross in the appropriate box (Table 10 below):

SA- strongly agree, A- agree, U- uncertain, D- disagree, SD- strongly disagree

Table 10. Trainees' opinion of the training programmes

No	Opinion	SA	A	U	D	SD
a	The trainer needs further training or were incompetent					
b	Training methods are appropriate					
c	Refreshments are poor (food, accommodation etc)					
d	Trainees are cooperative					
e	Training equipment is poor					
f	Learning material is appropriate					

Scores

For the positive questions b, d, and f, the higher the score the more the participants agreed with the statement. The responses were given the following scores:

strongly agree =4
agree =3
uncertain= 2
disagree = 1
strongly disagree =0

On the other hand, for the negative questions 'a', 'c' and 'e', the scoring was that the more they strongly believed that they disagreed with the statement the higher the score allocated to that statement.

strongly disagree = 4
disagree = 3
uncertain=2
agree= 1
strongly agree =0

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Higher scores (approaching 24) indicated that trainees held positive opinions of the training programme and lower scores (approaching 0) indicated that trainee's held negative opinions of the programme. A score of 12 was taken as an average opinion.

The table below (Table 11) indicates responses to questions with regard to the trainees' opinions of the training programmes (Question 6).

Table.11 Trainees' responses of their opinions on the training programmes

Scores out of 24	Frequency	Total scores
7	3	21
8	2	16
10	2	20
11	3	33
14	1	14
15	3	65
16	4	64
17	4	68
18	4	72
20	2	40
22	1	22
24	3	72
Total score	-	507
Average	-	14.9

The responses above indicated that the average score in terms of the trainees' opinion of the programmes were 14.9, which is above the 12-mark average. This then means that more than half of the respondent's opinions were generally more positive than negative with regard to the training programmes offered, methods, equipment, materials used and refreshments offered. Respondents also reported that fellow trainees were cooperative and requested that they be sent for more training, just like other workers in their various areas of work. A few respondents felt that some of the trainers were incompetent and

needed more training, while a large number of them had the opinions that further training was not necessary because most of them were competent trainers.

5. 2.6.4 Trainees' appreciation of the training programmes

Trainees were asked as to what they appreciated about the training programmes they underwent (Question 2). All the respondents but one appreciated the training programmes for different reasons, which are mentioned below.

Table 12: Trainees' responses on their appreciation of the training programmes

Responses	Frequency
Gained hands-on experience	18
Programmes are very informative	8
The trainers knew their work (were competent)	8
The programme was structured and properly organized	7
Trainer was aware of their training needs	2
Training facilities, materials and equipment were good	3
Some areas were interesting while others were not	4
Nothing (confidential)	1

A majority of the respondents appreciated most of the training programmes because they had hands on experience. Further discussions with the respondents indicated that the hands-on experience was important to them because it would be easy for them to apply the knowledge learnt to their work, as most of the materials or equipment used in training was the same as the one in their workstations.

Some of the respondents appreciated the programmes because they were informative, structured and well organised. They had the opinion that these programmes were worth every cent and were designed for the desired levels. Also very important was the fact

that some respondents appreciated training because they indicated that most of the trainers were competent for the courses they offered. The respondents indicated that this was significant to them because the trainers could draw on a lot of practical knowledge for the lessons they offered. Further talks with the respondents also revealed that they appreciated the programmes and their trainers because of the way they addressed their learning needs. Most of the trainers seemed to be aware of their needs and offered great help to them.

A small number of the respondents appreciated the training equipment facilities and materials. They indicated that most of the equipment was appropriate and was user friendly, while the materials and facilities proved to be the best of a kind.

The results also show that a very small number of trainees responded that the programmes offered at PORTO were either not appropriate or did not want to comment on this because they felt that their opinions would not be kept confidential. They suggested that an overall improvement of all programmes could be necessary.

5.2.6.5 Trainees' responses as to how training could be improved

The respondents were asked as to how they thought that the training they had undergone could be improved (Question 3).

Table 13: Trainees' responses on how training programmes could be improved

Responses	Frequency	Percentage (%)
Nothing need to be changed/no response	24	65
The training programmes should be more practical	7	15
Modules must be offered based on the training needs	4	12
Equipment and training material need to be improved	3	9
Trainers need to have hands on experience	2	6
Some of the courses must be offered in various languages	2	6

The training manuals & materials must be precise	2	6
Some trainers need further training (because they did not have the capacity to teach them)	1	3
Managers need to be trained in auditing skills	1	3
Follow-up training should be done to access level of skill	1	3

A greater part of the respondents had the opinion that there was no need to improve the training programmes because the programmes were considered good. On the other hand, the remaining respondents indicated that while the programmes were good, further improvement of these programmes would increase knowledge for the trainees.

Some respondent's suggestions of improving these programmes ranged from the improving or upgrading of equipment and material to the possibility of offering some of the courses in various languages, so as to cater for those who had a low level of education as well as those who showed that they were not exposed to English, since English proved to be the common language used in these programmes.

Other respondents suggested that some of the trainers should go for further training or up-grade of their skill because either their training methods were outdated or simply did not have the capacity to teach some of the modules offered. On the other hand, it also became clear that some respondents strongly believed that some of the managers should go for training, especially in identifying their training needs for them to understand their problems.

A few of the respondents suggested that some of the training manuals or programmes were either irrelevant or outdated. They further suggested that a direct approach to

training would be more effective as well as summarising the training material which they felt would be more helpful.

Some of the respondents had the opinion that training programmes could be more practical than they were. Others indicated that the training programmes could be improved by offering modules that were in line with their training needs.

Lastly, some trainees suggested that they needed follow-up training courses because some of the courses were not sufficiently complete. They further suggested that these courses should be offered at an advanced level for them to be competent in the subject.

5.2.6.6 Trainees' responses with regard to their experience with human relations
Trainees were asked to share their experiences with regard to human relations within their organisation (Question 4). Below are the responses that were given.

Table 14 Trainee's responses on their experience of human relations

Responses	Frequency	Percentage (%)
Good experience (employees were friendly, helpful, encouraging)	21	62
Nothing/ uncertain	10	29
Communication among staff members is good (clear roles)	8	24
Some staff are not as friendly, helpful and available to assist	5	15
Relations need improvement	4	15
Communication between colleagues need improvement	1	3

NB: Note that the frequency and percentages do not necessarily add up to 34 (total number of respondents) or 100% because respondents had different or a combination of opinions.

The experiences differed from person to person. Most noticeable was that most of the respondents (21) had the opinion that they had good relations with their colleagues. They found them to be very friendly, helpful, encouraging and liked working as a team when

given tasks a small number (10) of respondents were uncertain or had nothing to say on relations between their colleagues. This might have been either due to the fact that they felt that their answers would not remain confidential or indicated that they did not really notice their relations with their colleagues.

Good communication among staff came out to be one of the prominent perceptions amongst the respondents. This was evidenced by the fact that a considered number of employees had responded that there was not so much duplication or overlap of tasks within employees. They pointed out that in most cases they knew what their role and scope of work was, how they fitted in the organisation and how much they contribute to the organisation.

On the other hand, negative experiences were also noted, whereby a number of respondents reported that some staff members were not as friendly or as helpful as perceived and were hardly available to assist others. A very small number of trainees, however, pointed out that although there were good working relations within themselves at some levels; there was need for improvement of relations at all levels, as existing ones did not prove to be sufficient.

Lastly communication between management and subordinates according to a few respondents came out clearly as one of the failures of good human relationships in the organisation understudy. Further responses from the trainees indicates that this was a resultant of information not being properly transmitted, thus causing a lot of tensions

amongst employees because some employees were more informed than others. The less informed felt less important than the more informed. Respondents proposed that establishment of proper communication structures or channels of communication would improve the situation and reduce the existing divisions amongst them.

5. 2.6.7 The influence of training on job performance

Respondents were asked to express themselves as to how they felt training had improved their performance on their jobs (Question 5). Below are the responses that were given.

Table 15 Trainee's responses of the influence of training on performance

Responses	Frequency	Percentage (%)
I have become more knowledgeable & skillful	18	53
Has improved performance, methods, planning & approach to work	11	32
It is too soon to measure now	4	12
Has given me more, motivation and confidence in my abilities	4	12
Has made me understand my role and made work meaningful & fulfilling	4	12
Not much because its irrelevant and we are restricted	3	9
Has eliminated some work problems e.g. time wasting	1	3

NB: Note that the frequency and percentages do not necessarily add up to 34 (total number of respondents) or 100% because respondents had different or a combination of opinions.

The majority of the trainees felt that training had made them more knowledgeable and skillful, while a considerable number of them felt that training improved their work methods, plans, performances as well as the approach to work. They further indicated that they had learnt that planning work everyday saved time and improved job efficiency. Training also came out clearly as a motivating factor for working better as well as a factor that increased some employees' confidence and work abilities.

Respondents also pointed out that training helped them to understand their roles in PORTO as well as the extent to which each one of them contributed to the whole organisation. They further articulated that training made their work meaningful and fulfilling.

Some, on the other hand, stated that although it was too soon to measure the impact of training against work performances, it was fairly obvious that training would assist them in so many ways. Others reported that they had the skills but were not given a chance to utilise their skills because in most cases, management did not encourage new innovations or ideas that would benefit the whole organisation.

A small number of respondents reported that training had not improved their performance either because the training programmes were not relevant to their current jobs or simply because the programmes were not effective.

Lastly a few respondents pointed out that PORTO's training programmes had helped them eliminate some of the organisations' problems such as management of time, which reduced production in many cases. Through the skill acquired in the Project Management course most employees were able to manage time and plan their work efficiently.

5.3 Findings for trainers

5.3.1 Age distribution of trainer respondents

Table 16. Age

Age	Frequency	Percentage (%)
Below 20	-	-
21-30	2	22
31-40	2	22
41-50	5	56
50+	-	-
Total	9	100

5.3.2 Gender distribution of trainer respondents

Table 17. Gender

Responses	Frequency	Percentage (%)
Males	3	33
Females	6	67
Total	9	100

5.3.3 Home language spoken by trainer respondents

Table 18. Home language

Responses	Frequency	Percentage (%)
Afrikaans	2	22.2
English	2	22.2
Sotho	1	11.2
Venda	1	11.2
Zulu	3	33.3
Total	9	*100

NB. Total percentages * were rounded off to 100%

5.3.4 Type of training programmes for trainer respondents

Table 19. Type of training programmes

Responses	Number of respondents	Training period (days)
In-service	1	253
Learnership	1	253
Bursary Scheme	1	483
Management & supervisory	1	229
First Aid & Safety	1	7
ABET	1	7
Induction	1	305
Technical	1	5

Marine Training	1	90
Computer training	1	38

5.3.5 Distribution of occupation type of the trainer respondents

Table 20. Occupation types

Occupation	Frequency
Student	1
Network Analyst	1
Financial officer	1
Cargo coordinator	1
Training officer	1
Operations supervisor	1
Driver	1
Secretary	1
Trade worker	1
Total	**9**

5.3.6 Trainers' rating of the training programmes

5.3.6.1 Trainers' experience of the training programme

Question 1a

Respondents were asked to rate the training programmes in terms of their experience with

them. The programmes were rated on the following scale:

0=unsatisfactory, 1= unsatisfactory at times, 2=satisfactory, 3= good, 4=excellent

Scoring Key
Average of 4 means that experience and the level of skill was excellent.
Average of 2 means that experience and the level of skill was satisfactory
Any average below 2 means that experience and the level of skill was not satisfactory

Total score of 4 means absolutely positive per person and 34 respondents therefore translates to a score of 34x4=136
Total score of 2 means average per person and 34 respondents therefore translates to a score of 34x2=68
Total score of 0 means absolutely negative per person and for 34 respondents therefore translates to a score of 34x0=0

The responses were recorded in table 21 below:

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Table 21 Trainer's experience of training

Response	Frequency
0- unsatisfactory	-
1-unsatisfactory at times	-
2-satisfactory	5
3-good	4
4-excellent	-
Total	9

From the figures given in table 21 above, it is clear that over half of the respondents had the opinion that they had a satisfactory experience in terms of the training programmes, while the rest thought that their experience was good. The figures also illustrate that none thought that the programmes were excellent, unsatisfactory or satisfactory at times. Further interviews revealed that the reason for this was that some of the respondents had the opinion that although the programmes met their training needs, most needed an overall improvement and did not address all their needs.

5.3.6.2 Trainer's skill level ratings

Question 1b

Respondents were asked to rate their level of skill after training on the following scale and scores:

0-unsatisfactory, 1- unsatisfactory at times, 2- satisfactory, 3- good, 4- excellent

Scoring Key
Average of 4 means that their skill after training was excellent.
Average of 2 means that their skill after training was satisfactory
Any average below 2 means that their skill after training was not satisfactory

Total score of 4 means absolutely positive per person and 34 respondents therefore translates to a score of 34x4=136
Total score of 2 means average per person and 34 respondents therefore translates to a score of 34x2=68
Total score of 0 means absolutely negative per person and for 34 respondents therefore translates to a score of 34x0=0

The responses were recorded in table 22 below:

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Table 22   Trainers' skill level ratings

Response	Frequency
0- unsatisfactory	-
1-unsatisfactory at times	-
2-satisfactory	5
3-good	4
4-excellent	-
Total	9

The majority of the respondents pointed out that their level of skill as trainers was satisfactory, while a small number reported that their skill level as trainers was good.   On the other hand, another small number of respondents rated themselves unsatisfactory at times, in terms of the skill level they possessed for the courses they were offering.   The respondents argued that at times the courses needed expert knowledge and skill, which they did not possess. On the average, the results indicate that most felt that they had some skill but still needed further training because they were not fully competent as trainers.

5.3.6.3 Trainers' opinions of the training programmes

The respondents were asked to give their opinion with regard to the following statements (Question 6) by placing a cross in the appropriate box:

SA- strongly agree, A- agree, U- uncertain, D- disagree, SD- strongly disagree

Table 23 Trainers' opinions of the training programmes

Opinion	SA	A	U	D	SD
a. The trainees need further help or are incompetent					
b. Training methods are appropriate					
c. Refreshments are poor (food, accommodation etc)					
d. Trainees are cooperative					•
c. Training equipment is poor				ᵗ	
d. Learning material is appropriate					

Scores

For the positive questions b, d, and f, the higher the score the more the participants

agreed with the statement. The responses were given the following scores:

strongly agree,= 4
agree = 3
uncertain= 2
disagree= 1
strongly disagree=0

On the other hand, for the negative questions 'a', 'c' and 'e', the scoring was that the
more they strongly believed that they disagreed with the statement the higher the score
allocated to that statement.
strongly disagree = 4
disagree = 3
uncertain = 2
agree = 1
strongly agree =0

Higher scores (approaching a maximum possible score of 24) indicated that trainers held

positive opinions of the training programme and lower scores (approaching 0) indicated

that trainer's held negative opinions of the programme. A score of 12 was taken as an

average opinion.

Table 24 Trainers' responses of their opinions on the training programmes

Scores out of 24	Frequency	Total scores
14	1	14
15	1	15
16	1	16
17	1	17
18	2	36
19	1	19
22	1	22
24	3	72
Total	-	211
Average score	-	23.4

From the scores given above in table 24, the average score for the respondents was 23.4,

which is above the 12-mark average. This indicates that the trainers' opinions were more

positive with regard to the programmes than negative. They reported that trainees were cooperative, and needed help from time to time. Overall the respondents felt that the programmes offered, the refreshments that were given, equipment and learning material used were appropriate for both the trainees and the trainers.

5.3.6.4 Trainers' appreciation of the training programmes

Respondents were asked as to what it was that they appreciated about the training programmes they underwent (Question 2). Below are the responses given.

Table 25: Trainer's responses on their appreciation for the training programmes

Responses	Frequency
Interaction with the students was encouraging	4
Facilities, equipment and the training programme was good	2
Most programmes are not designed in line with training needs and therefore need a revamp	
Trainees appreciated and developed trust in trainers	1
The training material and equipment was user friendly	1
Nothing	1
Training material not up to required standard	1
Helped the trainer identify his skills gaps (do an introspection)	1

A majority of the respondents found interaction with students to be encouraging because this helped them get constant feedback on the training course. The respondents also indicated that feedback from learners helped them improve on how they offered the courses, as well as help them prepare reports back to management on areas that needed attention. Some trainers found the training facilities, equipment, material and curriculum to be suitable for the trainees. The respondents claimed that the equipment used proved to be suitable because it was user friendly to most of the learners. The respondents further reported that most trainees showed a lot of improvement in their work. This, therefore, supported the view that the programmes were effective.

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A small number of respondents reported that most trainees had developed some form of trust in a way that it became easy to teach and understand their shortcomings. Another small number of respondents appreciated the fact that they were given a chance to help trainees identify their own skills gaps and train them in accordance with the gaps identified.

Contrary to the common opinion of appreciation of the training programmes by most trainers at PORTO, the equipment and materials used as well as the way the programmes are run, some trainers had different opinions. They suggested that most training programmes need to be restructured and revamped. They felt that most of them were not designed to address trainees' needs.

5.3.6.5 Trainers' responses on how training could be improved

The respondents were asked as to how they thought the training they underwent could be improved (Question 3). The following are the responses given.

Table 26: Scores for respondents on how training programmes could be improved

Responses	Frequency
Improve training facilities, equipment, and materials	3
More time should be allocated to first time users	2
Training manuals should be in different languages	1
No need to improve	1
Do more practical work & bring in expert trainers	1

A majority of the respondents reported that the training facilities, equipment and learning materials needed to be improved for the programmes to be more effective. They articulated that some of the equipment was not adequate, especially in the practical fields and sometimes limiting in terms of learning.

Some respondents suggested that the programmes could be improved by allocating more time especially to first time users. They felt that in some cases, the time allocated was not enough to cover the course work. Other respondents suggested that training manuals and lessons should also be developed or offered in different languages because of the diverse groups that existed. They had the opinion that English, which was used as the language of training, was a barrier to the effectiveness of certain courses because most of the trainees were essentially Zulu speaking, and thus not sufficiently proficient in the use of English as a medium of instruction. The large numbers of responses also supported the fact that this may have affected the effectiveness of the courses because most of the learners did not have formal education and were not proficiently conversant and competent in English.

A small number of respondents proposed that a practical approach to learning should be encouraged so that the courses become more effective. They recommended that more experts in certain fields could be included so that they could come and share their experiences with the trainees.

Contrary to most, a few respondents had different views from the ones mentioned above. They felt that most of the training programmes were good and did not need any improvement because the training center was doing enough in terms of providing the right training facilities, materials, trainers and equipment to meet their needs.

5. 3.6.6 Trainers' responses on their experiences of human relations

Respondents were asked to express their views with regard to their experiences of human relations within the organisation (Question 4). Below are the responses given.

Table 27 Trainer's responses on their experiences of human relations

Responses	Frequency
The employees like to work as a team and support each other	7
There is a lot of creativity and innovations	2
There is good communications between colleagues	2
Communication between colleagues should be improved	1
The workforce is diverse and transformed	1

The majority of the respondents reported that human relations within PORTO were good. They reported that most of the employees worked cohesively, supplemented each other, and proved to be very supportive to each other.

Some trainers felt that having a diverse workforce contributed to the creativity of workers in the organisation. They had the opinion that PORTO's employees were generally transformed and accepted the differences among themselves, and in this way, they worked better together. Other respondents reported that there was good communication amongst colleagues and clients. Good communication with clients also proved to be vital as far as production was concerned because it is essential that goods products produced should match the customers' needs.

Lastly, while most trainers thought communication was good, some thought that it was not as good. They expressed the view that communication of instructions and information at lower level was not as effective as at higher levels. The respondents

proposed that an improvement of communication at all levels would improve the spirit of workers, which would directly impact positively on production.

5. 3.6.7 The influence of training on job performance

Respondents were asked to express themselves on how they felt training had improved job performance (Question 5). Below are the responses that were given.

Table 28 Trainer's responses on the influence of training on job performance

Responses	Frequency
Become more knowledgeable	5
Become more effective and efficient	2
Changed the approach of work-emphasis on planning	2
Learnt to be considerate and encourage new innovations	1

Most of the respondents reported that training increased their knowledge generally, while a few believed that it had made them more effective in the work place, efficient as well as improved their performance. Further discussions with the respondents indicated that training proved to change the trainers' approach to work. They alleged that new methods of planning work made them more confident and efficient especially where deadlines or time limits were placed.

A portion of the respondents reported that training taught them to be considerate and encouraged them to be more innovative. They also indicated that this improved the rate of individual contributions to work. They further articulated that the more skill individuals had the more they felt they had to contribute in terms of ideas and methods of work.

5.4 Quantitative and qualitative findings for the training manager

Questionnaire C was designed to tease out information with regard to training programmes that were offered at PORTO in the past four years. It was only given to the Training Manager and no comparison with other questionnaires or respondents were made because it was solely for information gathering purposes.

The manager was asked the following questions. The responses are underlined after each question:

QUESTION ONE

1.1   What was budgeted for and expended upon training in this industry in the period of 2001 to 2004? (a) Budget R5.9 Million (b) Expenditure <u>R5.2 Million</u>.

1.2   How many staff do you have in your organisation? (total) <u>282</u>

1.3   How many are directly involved in your training programmes?

(a)   Full-time <u>282</u>? Part-time <u>0</u>?

1.4   How many staff went on training courses during this period?

Type of course	2001			2002			2003			2004		
	P	F	PR	P	F	PR	P	F	PR	P	F	PR
Adult Basic Training (ABET)	<u>43</u>	<u>35</u>	55%	<u>26</u>	<u>21</u>	55 %	<u>7</u>	<u>8</u>	47 %	<u>10</u>	<u>0</u>	100%
Management & Supervisory training	<u>6</u>	<u>0</u>	100%	<u>8</u>	<u>0</u>	100%	<u>19</u>	<u>1</u>	95%	<u>29</u>	<u>29</u>	50%
Apprentice/Learnership training	<u>0</u>	<u>0</u>	-	<u>0</u>	<u>0</u>	-	<u>5</u>	<u>0</u>	100%	<u>7</u>	<u>0</u>	100%
Marine training	<u>76</u>	<u>0</u>	100%	<u>81</u>	<u>2</u>	98%	<u>89</u>	<u>4</u>	96%	<u>46</u>	<u>46</u>	50%
First Aid and safety training	<u>39</u>	<u>0</u>	100%	<u>26</u>	<u>0</u>	100%	<u>23</u>	<u>1</u>	96%	<u>24</u>	<u>0</u>	100%

	P	F	PR	P	F	PR	P	F	PR	P	F	PR
Induction training	48	0	100%	26	0	100%	18	0	100%	12	12	100%
Bursary scheme for employees training	44	6	88%	51	12	81%	63	8	89%	69	-	Training in progress
Internship/In-service training	0	0	-	15	0	100%	19	0	100%	11	-	Training in progress
Computer Training	0	0	-	15	0	100%	19	0	100%	11	0	100%
Technical training (plumbing, Electrical, carpentry etc)	76	3	96%	91	16	85%	81	6	93%	19	19	100%
TOTALS	332	44	88%	339	51	87%	337	28	92%	238	106	69%

KEY

* P= Passed
*F=Failed
*PR=Pass Rate (in percentage)

1.5 Which methods are used to identify training needs in your organisation? Please rate-using scale of **1-5 [with 1** indicating **not used at all** to **5** indicating **extensive use]**.

	Rate		Rate
Analysis of business plans/budgets	4	Skills audits	5
Line management requests	5	Other (specify)........................	
Performance assessments	5		

1.6 Which of the following training do you:

(a) Currently use; or

(b) Which you would prefer in your organisation? [you may circle more than one code].

	YES	NO
Language usage	1	2
Negotiation skills	1	2
Usage of technology	1	2
Basic office skills	1	2
Service culture	1	2
Others	1	2

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Others: Financial Management for non Financial Managers, Key Accounts, IS09001 and

ISO14000, Change Management, Logistic Management etc.

QUESTION TWO

2.1   What is the influence of training on the overall performance or service delivery
in your organisation?

<u>No influence</u>   <u>little influence</u>   <u>Strong influence</u>   <u>Very Strong influence</u>

1   2   <u>3</u>   4

2.2   To what extent is training linked to career development of staff?

<u>Not at all</u>   <u>Somewhat</u>   <u>Partly</u>   <u>Totally</u>

1   2   3   <u>4</u>

2.3   Does your organisation have measuring instrument(s) to evaluate the entry levels of personnel for
training courses?

Yes 1

<u>No 2</u>

2.4   Are there any training related problems your organisation encounters?

<u>Line Managers not releasing employees to attend training due to operational reasons</u>

<u>Some training service providers not meeting company requirements</u>

<u>Inadequate mentorship support</u>

<u>Poor maths and Science background on the part of trainees especially in Marine and Technical</u>

<u>related training.</u>

5.6.1 Discussions for Questionnaire C

Question 1

The manager indicated that a lot of money (R5.2 Million) was invested in training in the

period of 2001-2004. This confirms the fact that PORTO has massive training

programmes.   The statistics for the 2004 indicate that all the 282 employees in the

organisation were directly involved as far as training was concerned. This of course is a

clear indication that the industry seriously believes in developing its employees through on the job training programmes. Furthermore, the organisation proved beyond reasonable doubt that the training initiatives are done to improve employee's performance, which directly impacts on the production itself.

Question 1.4 has figures of how many trainees passed during the period understudy. For the past three years (2001-2003) the average pass rate was over 85%, and then it dropped to 69% for reasons that we have not been given. This also is yet another indication that the training programmes were effective because most of the students passed the courses. On average, most of the trainees passed the programmes over the years except for ABET which scored the lowest. There still seems to be a problem because the pass rate is just above 50% for 2001 and 2002, while below 50% for 2003. Improvements in the pass rates figures are seen in year 2004 where a 100% pass rate was obtained. Out of all the programmes, First Aid and Safety training came out as outstanding programmes. While passing is not necessarily an indication of a good programme, it could therefore be concluded that the pass rates indicated the programmes' effectiveness and show that a certain skill was obtained. As for ABET programmes, the low figures could be attributed to the fact that, the individuals in most cases are illiterate and not really exposed to the world of learning. In most cases they found it hard to grasp many things at the same time.

The question further sought to find out the methods PORTO used for identifying training needs. The manager indicated that line management requests performance assessments,

which were more frequently used than the analysis of business plans and budgets. Individuals were tested in terms of how they perform on a job. If they performed below the required standard; they were then referred to the relevant course to enhance their performance. He further reported that PORTO used various types of training such as language usage, negotiation skills, usage of technology, basic office skills, service culture, financial management for non-financial managers, key accounts, ISO9001 and ISO14000, change management and logistics management.

Question 2

When asked on his opinion with regard to how he felt about the influence of training on the overall performance or service delivery in PORTO, the manager responded by saying that he felt that training had a strong influence and was totally linked to career development of staff. He further indicated that the organisation had measuring instruments to evaluate the entry levels of personnel for training courses.

The respondents also pointed out that the organisation had training related problems such as the reluctance of some line mangers to release their employees due to operational reasons. It was also evident that one of the problems was that some of the training providers did not meet the organisation's requirements as far as training was concerned. The other problem was that there was inadequate mentorship support given to trainees after training to pursue their skill after training. Lastly, the manager felt that poor mathematics and science background contributed to the failure of trainees in courses such as marine and other technical related training.

5.7 Interpretation and data analysis

The study has three objectives also mentioned in Chapter one which need to be analysed in this chapter with the responses from respondents. The first objective was to find out if at all training and development are perceived to have positive consequences in the industry concerned. The second one being to evaluate the effectiveness of training different types of employees at different levels of production using various training methods and lastly the other objective of this study was to help the industry evaluate their training programmes by designing questionnaires, which will determine whether any type of training is worthwhile. Qualitative data was analysed using frequencies of responses. Objectives were regarded to be supported where the frequency of the responses were high. The more respondents responded positively towards a certain statements/ objectives the more the statement was supported and the more conclusion would be made that that objective was met. For example, if 8 out of 10 trainees responded positively to a statement, that statement or an objective could be taken as supported. Qualitative analysis was mainly used to check the responses of the trainees in the paragraphs below.

Enough evidence from participant responses suggests that the training and development programmes were effective. As indicated, in Table 11, respondents had the opinion that most of the training programmes were good. Respondents' average score was 14.9, which is above the average score of 12. This translates to more than half of the respondents responding that the programmes were effective and good. The results also provide evidence that the types of training programmes had direct influence on the respondents' responses. The type of training programme furthermore determined whether

the respondent thought that the training programme was good or not. In effect, some programmes were perceived to be extremely good and effective, while others were perceived to be bad and ineffective. An example of such a programme that was not effective was the supervisory development programme.

The reasons for such a programme to be perceived ineffective could be twofold. Firstly, the programme could be ineffective in the short-run because evaluators might be expecting to see the results immediately after training. The programme could also be one of those that only yield its results or show its effectiveness in the long run. For example, a programme like Supervisory Development Programmes in PORTO was established to groom future supervisors or managers and not those managers who will take over immediately. The skill attained may only be realised after the individuals concerned get promoted into these posts. This could take two to five years. A recommendation is made that all training programmes be categorised in terms of the length of expected impact of the training. If a programme is categorised as 'long-term,' evaluation of their effectiveness immediately after training would be futile.

Secondly, the programme was perceived to be ineffective because, to some extent the programme could not have been well designed and, therefore, failed to meet the trainee's needs. The methods, equipment as well as learning material could be inappropriate for such training or the learner.

The respondents that identified this ineffective programme suggested that there was a need to give attention to the areas of concern mentioned. The researcher recommends that a thorough skills audit be done before trainees are sent for training. Findings also indicated that dissatisfaction with these training programmes could be attributed to the fact that there were assumptions made concerning employees' skill levels. For example, a person could be sent to an advanced level computer course, when he or she actually was meant to be sent to an intermediate level computer course or the other way round. These mistakes cause frustrations to the trainees because the course becomes boring if they already have the skill or it becomes fairly difficult for them because they do not have the basic knowledge and skill (which might be a requirement before attending such a course). Another recommendation is that training programmes should be designed to meet the trainees' needs. Again, skills audits could help training providers design training programmes with outcomes that address trainees' needs.

Enough evidence also indicated that inappropriate language (English) was used in most of the training programmes offered at PORTO. This was observed mostly in those programmes whose trainees had low levels of education. The study supports the notion raised by most of the affected respondents that the use of an appropriate language could make training more effective. As noted in the earlier paragraphs, most of the training programmes were offered in English. A recommendation is, therefore made that, where appropriate, alternative language should be used depending on the target population and education of the trainees. For example, if all the trainees in a class are Zulu and not highly educated, Zulu should then be used. It became evident that it was not necessary

for the organisation to offer certain courses in English when the trainees were not highly qualified and English was not their first language. In such cases, the use of a mother-tongue language could be more appropriate. This of course is only possible if the trainer can teach or train in that language, otherwise such efforts to improve the course will prove to be futile. This also depends on whether all participants speak the same language. If it is not the case, then again, it will not be effective to use a different language.

Training materials, equipment, methods and refreshments, were evidently appropriate for most respondents and only needed little improvement. This study supports the recommendations outlined below with regard to improving the *status quo* as far as training is concerned:

Since a portion of the trainees had some concerns with regard to the structure of the training programmes, it is only logical to redesign these programmes. The major concern raised was that some programmes were rather theoretical; for example, learnerships. It is suggested that these programmes be more practical since most of the jobs in this industry were technical. More experienced trainers (preferably accredited trainers) should be asked to offer these programmes so that they share their practical experiences with trainees. Trainees need to have a feel of the real work environment by doing practical work. More practical projects or assignments should be given to trainees when being tested for competency. At the same time, training notes and manuals could be more

precise and to the point. Learning material should, therefore, be summarized and have practical exercises.

The researcher further recommends that trainers should be evaluated at certain periods to check whether they are competent or whether they are using the right training methods and materials. An alternative recommendation is also made that existing service providers be evaluated by PORTO officials and the trainees. If any are found wanting, they should be sent for further training by their employers or be replaced by better trainers who are competent and accredited by SAQA.

Another recommendation is that all employees who have completed their training should be interviewed to check whether they need further assistance, follow-up training courses as well as support before utilising the skill learnt. Follow-up courses could then be recommended to help trainees be more competent in their jobs.

It is also recommended that managers or supervisors must be thoroughly trained on how to audit skills and compile skills audit reports. The research has indicated that certain managers had recommended certain trainees to irrelevant courses or to wrong training course levels. This resulted in frustrations among trainees because they knew most of the course content and that this would not benefit them in their field of work. Responses from some participants also indicated that some managers do not either provide the necessary support and equipment to employees after training or evaluate whether training had an impact on performance or not. Other respondents indicated that they did not know

how much skill they had because the newly learnt skill was not going to be used immediately. It is therefore recommended that skills learnt should be utilized immediately or otherwise could result in being unlearnt.

The frequency of certain courses could also be improved. A few respondents had the opinion that certain courses should have follow-up programmes where trainees could be evaluated in terms of their skill level. Respondents suggested that some courses were not complete and further training could lead them to be more competent in the subject. In other words, evaluation of skills levels before and after training should be encouraged when evaluating training programmes. Such evaluations could help in determining production level, which factor falls out of this research. The researcher could not explore this aspect because there was no *pre-testing* done in any of the courses. All the trainees interviewed had already gone for training therefore one could not evaluate production improvement caused by training, if there was any. For example, if a typist could type 10 words per minute before being sent for a typing course, and she or he was able to do 30 words per minute after the training intervention, this would mean that a direct improvement was observed. This study, therefore, recommends thorough *pre* and *post-testing* of skill and ongoing measurement of how much produce each employee contributes to the whole industry.

It could, therefore, be concluded from the above evidence that on average, PORTO used good trainers who used proper equipment and learning material. Thus, programmes were

effective although an improvement on all aspects would be recommended to increase their efficiency.

In terms of how much training and development had an influence on job performance; enough evidence also indicate that most respondents had the opinion that training and development had increased their level of skill, knowledge as well as their job performance. That is to say, more than half of the respondents reported that training improved their job performance. In fact, the respondents had the opinion that not only did training improve their work performance, but it also helped them approach work differently, in the sense that it helped them plan their tasks before executing them. This approach proved to be important because many resources were saved and work problems such as time wasting had been eliminated. Training was found to improve employees' performance despite the negative factors mentioned above. They became more efficient, using equipment and work material more appropriately than before being trained.

Some responses testified to the fact that some problematic areas or concerns with regard to training were not addressed. The researcher recommends that innovations must be encouraged and opportunities be provided to perform and evaluate new skills. Supervisors should interview employees after training to find out what further support they need so that they can use the skill learnt immediately. This is important because long periods of lay-off lead to trainees unlearning the skill.

Another important element observed was of the extent to which training and development improves the skill level. This overlaps with the latter element that looks at job performance. There was also sufficient proof from the trainees' responses that training had improved their skill.

The findings of this study also showed that training had a positive impact on the performance of individuals on different jobs and levels. The more the employees were trained in their jobs with relevant programmes, the more they became knowledgeable, skilled or competent in their jobs and adversely the more they performed on their jobs. Training and development interventions in PORTO had helped enhance performance on the jobs. This assumption was made on the basis that like in any other research, the other variables such as motivation remain constant as far as improvement of performance and productivity was concerned.

In addition to training, good relations with colleagues, supervisors and managers were critical factors that came out evident as facts that improved work performance and production.

5.8 Conclusion

With all the above findings, the research seems to have yielded good results, although some areas could not be probed into. Most of the respondent's responses suggested that PORTO's training programmes were to a large extent effective.

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The chapter has further identified the shortcomings of the training programmes, given out recommendations in areas that needed improvement, in so far as training and development at PORTO is concerned. In this regard the chapter then draws conclusive remarks on the results. Finally, the chapter has also highlighted areas where the research has met its objectives and the extent to which it has done so.

Chapter Six

DISCUSSION OF RESULTS, RECOMMENDATIONS

AND CONCLUSIONS.

6.1 Introduction

This chapter focuses on discussion of the results presented in Chapter Five. The chapter also makes further overall recommendations on areas that need improvement as well as concluding this research investigation.

6.2 Discussion of results and recommendations

The study indicates that most respondents supported the opinion that training had

an impact in their lives and their performance on the jobs. Most respondents felt that

training enhanced their skill levels and job performance. Training also seemed to be

popular with most employees at PORTO because participation figures indicated that

everyone was involved. Data collected by using Questionnaire C indicated that all 282

employees were involved in some type of training.

Erasmus et al (1996) suggest that like any other form of investment, training can only be

seen to be a contribution to improved efficiency by most managers if it yields results in

form of improved performance and outweighs its costs.

Obviously PORTO's management value training because the figures indicate that in the last three years, the organisation has invested much money in training and continues to do so because of its good returns. Last year alone, PORTO spent R5.2 million on training. A recommendation is therefore made to PORTO's management that training benefits must not be measured in terms of money alone. Intangible benefits should also be included which could include individual job satisfaction. The more competent individuals are through relevant training the more confident and satisfied they get to be because work becomes meaningful. Satisfied employees cooperate with their colleagues. They also tend to adapt well after training to new changes such as technological developments, which may involve the use of machines and new technology. Improved performance through training will help managers realise the benefits of training and create positive attitudes towards training initiatives. Individuals also regard training as an investment in a sense that this might lead to future promotions, increase in earnings, better career opportunities and personal fulfillment.

Training should be done at all levels because good performance is needed at all levels. It does not make sense to train the semi-skilled or low skilled employees (labourers) only. This is because as much as these employees contribute directly to production, skilled employees such as managers and middle managers also contribute to production, although they do so indirectly. Management should put in place support systems that would assist trainees who have just returned from training. This could include assigning mentors to each one, so that these trainees are assisted to transfer their newly acquired skill to job performance.

Apart from organisations and employees benefiting from training, the South African training legislation, such as the Skills Development Act (SDA), No.97 of 1998, enforces big industries with more than 50 employees to pay training levies equivalent to 1% of their payroll per month to South African Revenue Services. Such organisations are allowed to claim back this money when they meet certain requirements. Organisations also benefit by receiving rewards from the government if they train more. The legislation also enforces social responsibilities on large organisations such as PORTO to train and empower the unemployed population surrounding these industries. PORTO already has learnerships, which help surrounding communities, or students acquire skill and get groomed for jobs within and outside the organisation. As another social responsibility, PORTO is also required to recruit employees from the surrounding communities especially those that are underprivileged in terms of education and skill. The industry is obliged to some extent to skill such employees.

Nel et al (2001) also propose that large organisations such as PORTO should help government in reconstructing and developing the country. This could be done by ensuring that every citizen is entitled to active participation in the economy, not only help create wealth and prosperity but also share its fruits. The growth of the industry should then help residents of the surrounding communities by providing them with jobs and necessary life-skills.

To this effect, a recommendation is, therefore, made that the industry should promote programmes that empower communities around the organisation. Training should be

regarded as a tool used to create jobs and be based on the populations' knowledge, environment, problems and aspirations. It should be offered in response to market demands and not just as a social service. Since the formal economy cannot generate sufficient employment for the expanding labour force in South Africa, training helps with survival in the formal sector. Having basic literacy, numeracy and technical skills would help most students and the unemployed start up their own business if they have no formal employment.

The Employment Equity Act (EEA) No.55 of 1998 promotes the advancement of designated employees in terms of skill-up grades. The act defines designated employees as employees that were previously disadvantaged and were not given a fair chance to study or get a qualification because of the discriminatory policies practiced by the old government. The act further defines designated employees as: Blacks (Africans, Indians and Coloureds), women and the disabled.

On the other hand, the Skills Development Act recommends that every organisation should audit their skills, have a Workplace Skills Plan (WSP) and train its employees according to their training needs that appear in the WSP. Furthermore the SDA emphasizes that training should be done with all employees that have been identified as lacking certain skills. The Act stipulates that preference in terms of training should be given to those that have been defined as designated groups by the EEA.

A recommendation is, therefore, made that priority in training be given to those that are from designated groups. PORTO should have policies such as training and development, Affirmative Action and Bursary policies that promote training of employees in line with the SDA and the EEA. Bursaries should be issued to those that cannot afford to study or acquire formal qualification. This includes students that are studying around Zululand where the organisation is situated or those that are low earners within that organisation. Empowering these groups would, in the long run, put them on an equal footing as those that are qualified when competing for promotions or advancements or simply employment.

In addition to this, women should be given preference in training as the EEA and SDA stipulate. Women empowerment training programmes or workshops should be conducted to inspire and encourage them to take up technical jobs or science subjects. Efforts should be made to design programmes that could accelerate the development of women in technical fields. Women of potential should be identified and given first preference as far as training is concerned. This of course should be done in line with other initiatives such as Employment Equity goals as could be stipulated in the Employment Equity plan of the organisation.

Another recommendation is that proper evaluation measures should be implemented. 'Pre' and 'post' testing of skills should be done to check the ratio changes in terms of performance after a trainee completes a course. This could help in highlighting the benefits of training. Benefits could be measured through *manager's reports or score*

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cards which would indicate whether there were improvements in performance after training; *production and sales reports,* which would indicate whether there were improvements in productivity; as well as *attendance registers,* which to some extent could determine whether an organisation has satisfied employees or not. Large numbers of absentees would indicate that there were dissatisfied employees. These measures could help determine what changes could be made so as to improve employee performance or training programmes. Evaluation forms could be used to evaluate all training programmes and trainers' effectiveness. If the programmes or trainers remain wanting or ineffective then proposals for change to these trainers, programmes, techniques or procedures should be made. Evaluation of training programmes also help determine whether training programmes are appropriate and meet the objectives. That is to say, whether trainees gained the skill and knowledge they had intended to gain. Trainees or trainers could suggest ways of improving these methods of training. Evaluations could also assist in identifying problems that hinder effective training. Solutions to these problems could also be brainstormed through the evaluation forms and could help reduce problems or eliminate them. It is also recommended that appropriate methods of training be used for all training programmes. For example conferences and presentations could be more appropriate for manager's courses while lectures could be ideal for learnership students.

Unless management insists on the evaluation of training and development programmes, there is no possibility of determining the exact benefits. If training is not evaluated, there will be no records to determine whether the financial investment made by the

organisation in its human resources has been successfully utilised or whether the overall competencies of skills of employees have increased. Erasmus et al (1999) suggest that the evaluation should focus on two aspects: the *effectiveness* of training which determines whether the current training needs were presented and the *efficiency* of training which help in determining whether the correct methods and techniques were used to impart knowledge of the course to the students.

It also came out clear from some respondents that there were some problems for PORTO as far as training was concerned, that inhibited growth or increase in production. Firstly, some managers seemed to be reluctant to send their employees to training programmes because they either did not believe in training or, because operational requirements did not permit them to do so. The research recommends that if need be, such managers should be workshopped on the importance of training employees and help them plan for these programmes so that there are no disturbances in their operations. Extreme cases could be those that still do not understand the value of training. These managers could be sent for change and diversity management courses where they could learn on how to manage change and diversity. Managers should send employees to relevant courses for them to produce more and for the industry to grow.

Increase in population came out to be one of the other major challenges to PORTO. An increase in population around Zululand and the rest of the country raises expectations for industries in the Zululand Region to grow and support their communities. These industries are expected to expand and create jobs. PORTO is similarly expected to

expand their training programmes so that they take in as many trainees, students or employees, as possible. Increase in production as discussed in the latter paragraphs increases the amount of contribution by that organisation to the economy of the country. A problem that was pointed out by the training manager was that some employees did not have a good educational background, thereby making it hard for them to pass some courses. The researcher supports the manager's suggestion that there was a need for most trainees to have a good mathematics and science background because most courses required knowledge in these subjects. The researcher also recommends that the organisation design programmes that will assist bridging the gaps that exist in terms of certain subjects and then later send these trainees to do the relevant courses or alternatively fuse the modules into these courses so that they meet the intended objectives.

Another training problem that was identified was that some service providers (trainers) did not meet company requirements. Efforts should therefore be made by the Training Manager through the relevant Sector of Education and Training Authority's (SETAs) to employ only accredited trainers for all the training programmes offered at PORTO. A recommendation is made that all trainers be checked if they are accredited by South African Qualifications Authority (SAQA) to ensure that their material is quality assured. Evaluations of trainers by learners should be made at the end of each course so as to check whether trainers are competent in their subject matters.

6.3 Conclusion

The research supports training as a tool for improving job performance, productivity and quality of production. Good quality produce encourages competition in the market and helps organisations and the economy of the country grow. It is also for such reasons that this research has deduced that training does improve productivity. Training has also been seen to contribute to the welfare of the surrounding communities by creating employment, or life-skills to start business. It cannot, therefore, be overemphasized that the benefits of training are not only measured in monetary terms. Non-monetary benefits of training are just as important to both employees and the organisation because of the impact these benefits have on production and individual performances.

Certain training programmes have proven to be appropriate for employees on certain occupational levels and not for others. What works for one might not necessarily work for the next person or the next organisation. A needs analysis of each individual would, therefore, help address specific training needs and determine the kind of training such individuals' needs. Discussion has focused on the need for designing or modifying evaluation methods. This helps organisations calculate accurately in terms of how they benefit from training initiatives.

Lastly, the research proved to be worthwhile because it identified problems and suggested solutions, which could help the training center, reduce training problems or eliminate them completely.

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Relevant training is, therefore, strongly recommended because it improves job performance, and the skill learnt is transferred or tested immediately. Irrelevant training, on the other hand, does not improve job performance as the skill is hardly used or not used at all and unlearnt after a certain period.

REFERENCES

Alberts, E.M. (1998). *Human resources management: Textbook for technikon students,*
Johannesburg: Thomson.

Andrews, Y. (1998). *The personnel function.*
Pretoria: Kagiso Tertiary

Anthony, W. Pamela, P. Perrewe, L. & Kacman, L. (1993).
Strategic human resources management.
Forthworth: Dryden.

Argyris, C. (1981). *Management and organisational development.*
New York: McGraw-Hill.

Baird, L. Schneier, C.E. & Laird, D. (1983). *The training & development sourcebook,*
Massachusetts: The human resources development.

Bailey, N.D. (1987). *Human resources management.*
New Jersey: Prentice-Hall.

Barker, B.P. (1999). *Human resources management.*
London: Prentice-Hall.

Beardwell, I. & Holden, L. (1995). *Human resources management.*
London: Pitman.

Behr, A.L. (1998). *Empirical research methods for the human sciences.*
Durban: Butterworth.

Bellis, I. (2002). *Planning for skills development: A handbook for practitioners.* South Africa: Knowledge Resources.

Berger, M. (1986). In Rothwell, W.J. & Kazanas, H.C. (1994). *Human resources development: A strategic approach.* Amherst, Mass: Human Resources Development.

Blanchard, N.P. & Thacker, J.K. (2003). *Effective training: systems, strategies and practices.* New York: Prentice-Hall.

Bless, C. & Higson-Smith (1995). *Fundamentals of social research methods: an African perspective.* Cape Town: Juta.

Bramley, P. (1991). *Evaluating training effectiveness.* London: McGraw-Hill.

Brown, R.B. & Harvey, D. (2001). *Human resources management.* New Jersey: Prentice-Hall.

Bryman, A. & Burgess, R.G. (1995). *Analysing qualitative data.* New York: Routledge.

Bryman, A. (2000). *Quantity and quality in social research.* New York: Routledge.

Bushe, T. (1995). *Choosing training methods.* London: The Cromwell.

Cascio, W.F. (1998). *Applied psychology in human resource management.* New Jersey: Prentice-Hall.

Carrel, M.R., Elbert, N.F. Hatfield, R.D. Grobler, P.A., Marx, M. & van der Schyf, S. (1998). *Human resources management in South Africa.* Cape Town: Prentice-Hall.

Charteejee, M. (1999). *Human resources management.* New Jersey: Prentice-Hall.

Chris, L.P. (1999). *Human resources management.* New York: Routledge.

Coperrider, S.J. & Srivasta, P.L. (1997). *Strategic human resource management.* New Jersey: Boston.

Cornelius, N. (1991). *Human resources management: A managerial perspective,* London: International Thomson.

Craig, R. (1986). *The training and development handbook.* New York: McGraw-Hill.

Cross, J. & O'Driscoll, T (2005) *Training magazine, March 200.5* New Jersey: International Thomstone.

Cuming, M.W. (1985). *Theory and practice of personnel management.* London: Butler and Turner.

De Cenzo, D.A. & Robbins, S.P. (1994). *Human resources management concepts and practices.* New York: John Wiley & Sons.

Deming, B.S. (1982). *Evaluating job-related training.*
New Jersey: Prentice-Hall.

Dessler, G. (1996). *Human resources management.*
London: Prentice-Hall.

Dessler, G. (1999). *Human Resources Management.*
London: Prentice-Hall.

Dessler, G. (2000). *Human resources management.*
London: Prentice-Hall.

Donaldson, L. & Scannell, E.E. (1986). *Human resource development: The new*
trainer's guide.
Massachusetts: Addison-Wesley.

Du Toit, J H. 3rd Wave management consulting cc.
Jacques.dutoit@3wmc.co.za

Erasmus, B.J. & van Dyk, P.S. (1996). *Training management: A practical approach.*
Johannesburg: International Thomson.

Ferrel, O.C. & Hirt, G. (1993). *Business: A changing world.*
Boston: Homewood.

Fisher, C.D. Schoenfeldt, L.E. & Shaw, J.B. (1990). *Human resource management.*
Boston: Houghton Mifflin.

Fisher, C.D. Schoenfeldt, L.E. & Shaw, J.B. (1993). Human *resource management.*
Boston: Houghton Mifflin.

Foundation for Research and Development (FRD) (1996). *South African science and*
　　　　　　　technology indicators:
　　　　　　　Pretoria: FRD.

Graham, H.T. & Benett, R. (1993). *Human resources management.*
　　　　　　　London: Business Handbooks.

Gerber, P.D. Nel. P.S. & van Dyk, P.S. (1996). *Human resources management.*
　　　　　　　Johannesburg: International Thomson.

Gerber, P.D. Nel. P.S. & van Dyk, P.S. (2000). *Human resources management.*
　　　　　　　Johannesburg: International Thomson.

Gerber, P.D., Nel. P.S. & van Dyk, P.S. (2001). *Human resources management.*
　　　　　　　Johannesburg: International Thomson.

Goldstein, I.L. (1991). *Training in work organizations.* In M.D.D. & L.M. Hough (eds).
　　　　　　　Handbook of industrial and organizational psychology. (2nd ed.
　　　　　　　Vol.2, pp 507-619) Pato Alto, California: Consulting
　　　　　　　Psychologists.

Goldstein, I.L. & Ford D. (1998). *Training in organisations.*
　　　　　　　California: Consulting Psychologists.

Go'mez-mejia, L.R., Balkin, D.B. and Cardy, R.L. (1995). *Managing Human Resources.*
　　　　　　　New-Jersey: Prentice-Hall.

Good, S.D. (1983). *Human Resources Management.*
　　　　　　　Massachusetts: The human resource development.

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Hollway, W. & Jefferson, T. (2000). *Doing qualitative research.*
London: Cromwell.

Human, L. (1991). *Educating and developing managers for changing South Africa: Selected essays.* Cape Town: Juta.

Humphrey, J, & Halse, F. (1991). *Profit from training by objective.*
Cape Town: Juta.

Isaak, M.M. & Michael, B.L. (1995). *Managing human resources.*
Oxford: Blackwell.

Institute of Personnel Management (2003) *Learning as a n investment.*
Oxford: Blackwell

Ivancevich, J.H. & Glueck, W.F. (1986). *Foundations of personnel: Human resource management.* Texas: Business.

Kearsley, G. (1982). *Cost, benefits and productivity in training systems,*
Reading, Massachusetts: Addison-Wesley.

Kirkpatrick, D.L. (1998). *Evaluating training programmes.*
London: Berret-Koehler.

Laird, D (1987). *Approaches to training and development.*
Reading, Massachusetts: Addison-Wesley.

Laudon, K.C., Traver, C.G., & Laudon, J.P. (2003) *Information technology and society.*
Cambridge: Course Technology.

Law, D.S. and Edwards, B. (1995). *Human resources management.*
New Jersey: Prentice-Hall.

Meyer, M. (2002). *Managing human resources.*
Oxford: Blackwell.

Meyer, M. (2002). *Managing human development: an outcomes-based approach.*
Durban: LexisNexis, Butterworths.

Middleton, J. Ziderman, A., & Adams, A.V. (1993). *Skills for Productivity.*
New York: Oxford University.

Mobey, C. & Graeme, S. (1995). *Strategic Human Resource Management.*
Oxford: Blackwell.

Moorby, E. (1991). *How to succeed in employee development: Moving from vision to results.* London: McGraw-Hill.

Moorby, E. (1996). *Training and employee development.*
London: McGraw-Hill.

Muchinsky, P.M., Kriek, H.J & Schreuder, A.M.G. (1990). *Personnel psychology.*
Johannesburg: International Thomson.

Muchinsky, P.M. Kriek, H.J. & Schreuder, A.M.G. (1999). *Personnel psychology.*
Johannesburg: International Thomson.

Nadler, L. (1982). *Designing training programmes.*
Reading, Massachusetts: Addison-Wesley.

Nadler, L. & Nadler, Z. (1989). *Developing human resources.*
San Franscisco: Jossey-Bas.

Nel, P.S. Gerber, P.D. van Dyk, P.S. Haasbroek, G.D. Scholtz, H.B. Sono, T. and
Werner, A. (2001). *Human resources management.*
Cape Town: Oxford University.

Neuman, W.L. (2000). *Social research methods: Qualitative and quantitative*
approaches.
Boston: Allyn & Bacon.

Noe, R.A. (2001). *Employee training and development.*
London: McGraw-Hill.

Olivier, C. (1998). *Outcomes-based education & training programmes.*
New York: OBET Prolfafi.

Read, M.A. & Barrington, H. (1997). *Training interventions: managing employee*
development.
London: IPD.

Reay, D.G. (1994). *Selecting training methods.*
New Jersey: Nochols.

Reed, P.S. Pearson, T.P. Douglas, J.J. Swinboorne, B.S. & Wilding, P. (2001).
Managing human resources development.
Boston: Houghton Mifflin.

Republic of South Africa, (1991). 1990 *Annual report of the national manpower*

commission.

Pretoria: Government

Republic of South Africa, (1998). *Employment equity act No.55 of 1998.*

Pretoria: Government.

Republic of South Africa (1981). *Manpower training act No.56.*

Pretoria: Government.

Republic of South Africa (1995). *South African qualifications authority act, No.58,*

Pretoria: Government.

Republic of South Africa (1998). *Skills development act, No. 97.*

Pretoria: Government.

Republic of South Africa (1999). *Skills Development levies act, No. 9.*

Pretoria: Government.

Republic of South Africa (1995). *National qualifications framework act.*

Pretoria: Government.

Riggs, J.L. & Felix, G.H. (1993). *Productivity by objectives.*

Englewood Cliffs, New Jersey: Prentice-Hall.

Rose, D. & Sullivan, O. (1996). *Introducing data analysis for social scientists.*

Bristol: Open University.

Rothwell, W.J. & Kazanas, H.C. (1994). In Nel, P.S. Gerber, P.D. van Dyk, P.S. Haasbroek, G.D. Schultz, H.B. Sono, T. & Werner, A. (2001).
Human resources management.
Cape Town: Oxford University.

Stammers, R. & Patrick, J. (1995). *The psychology of training.*
London: Methuen.

Tepper, B.B. (1994). *The new supervisor, skills for success business one.*
Boston: Irwin/Mirror.

Tracy, W.R. (1984). *Designing training & development systems.*
New York: Amacon.

van Dyk, P.S. Nel, P.S. van S leodolff, P. & Haasbroek, G.D. (1997).
Training management. Johannesburg: International Thompson.

Wancevich, J.M. (1995). *Human resource management.*
Irwin: Chicago.

Wiehahn, N.E. (1981). *The complete Wiehahn report.*
Johannesburg: Lex Patria.

QUESTIONNAIRE A:
EVALUATION OF TRAINING PROGRAMMES
(FOR THE TRAINNEE)

Name ....
Age ....
Gender ....
Home language ....
Training programme ....
Level of Education (Highest qualification) ....
Occupation..
Training Period..

1. Please rate the training programme on the following scale:
   0 – unsatisfactory 1- unsatisfactory at times 2- satisfactory 3-good
   4-excellent

a. What was your experience of the training programme? (How did you find it)

0	1	2	3	4

b. Please rate your level of skill after training

0	1	2	3	4

2. What did you appreciate about the training you received?

_____
_____
_____
_____
_____

3. How can the training be improved? (your opinion)

_____
_____
_____
_____
_____
_____

4. What is your experience of human relations at your organisation?

_____
_____
_____
_____
_____
_____
_____

5. How has training improved your performance on your job?

_____
_____
_____
_____
_____
_____
_____

6. Please give your opinion with regard to the following statements by placing a cross on the appropriate box.

SA- strongly agree A- agree U- uncertain D-disagree SA- strongly disagree

		SA	A	U	D	SD
a	The trainer needs further help or is incompetent					
b	Training methods are appropriate					
c	Refreshments are poor					
d	Trainees are cooperative					
e	Training equipment is poor					
f	Learning material is appropriate					

QUESTIONNAIRE B:
EVALUATION OF TRAINING PROGRAMMES
(FOR THE TRAINNER)

Name ....
Age ....
Gender ....
Home language ....
Training programme ....
Level of Education (Highest qualification) ....
Occupation..
Training Period..

1. Please rate the training programme on the following scale:
   0 – unsatisfactory 1- unsatisfactory at times 2- satisfactory 3-good
   4- excellent

a. What was your experience of the training programme? (How did you find it)

0	1	2	3	4

b. Please rate your level of skill as a trainer

0	1	2	3	4

2. What did you appreciate about the training?

_____
_____
_____
_____
_____

3. How can the training be improved? (your opinion)

_____
_____
_____
_____
_____
_____

4. What is your experience of human relations at your organisation?

_____

_____

_____

_____

_____

_____

5. How has training improved your performance on your job?

_____

_____

_____

_____

_____

_____

6.   Please give your opinion with regard to the following statements by placing a cross on the appropriate box.

SA- strongly agree A-agree U-uncertain D-disagree SD-strongly disagree

		SA	A	U	D	SD
A	Trainees need further help or are incompetent					
B	Training methods are appropriate					
C	Refreshments are poor (accommodation, food etc)					
D	Trainees are cooperative					
E	Training equipment is poor					
F	Learning material is appropriate					

QUESTIONNAIRE C

For the training Manager

QUESTION 1

1.1   What was budgeted for and expended upon training in this industry in the period of 2001 to 2004?

    (a) Budget............................... (b) Expenditure.........................

1.2   How many staff do you have in your organisation? (total).......................

1.3   How many are directly involved in your training programmes?

    (b) Full-time...............................? Part-time.............................?

1.4   How many staff went on training courses during this period?

Type of course	2001		2002		2003		2004	
	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed
Adult Basic Training (ABET)								
Management & Supervisory training								
Apprentice/Learnership training								
Marine training								
First Aid and safety training								
Induction training								
Bursary scheme for employees training								
Internship/In-service training								
Computer Training								
Technical training (plumbing, Electrical, carpentry etc)								

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1.5 Which methods are used to identify training needs in your organisation? Please rate-
using scale of **1-5 [with 1** indicating **not used at all** to **5** indicating **extensive use]**.

	Rate		**Rate**
Analysis of business plans/budgets		Skills audits	
Line management requests		Other (specify)........................	
Performance assessments			

1.6 Which of the following training do you:

    (c) Currently use; or

    (d) Which you would prefer in your organisation [you may circle more than one code].

	YES	**NO**
Language usage	1	2
Negotiations skills	1	2
Usage of technology	1	2
Basic office skills	1	2
Service culture	1	2
Others	1	2

QUESTION 2.

2.1   What is the influence of training on the overall performance or service delivery in your organisation?

No influence	little influence	Strong influence	Very Strong influence
1	2	3	4

2.2   To what extent is training linked to career development of staff?

Not at all	Somewhat	Partly	Totally
1	2	3	4

2.3   Does your organisation have measuring instrument(s) to evaluate the entry levels of personnel for training courses?

Yes 1

No 2

2.4   Are there any training related problems you organisation encounters?

_____

_____

_____