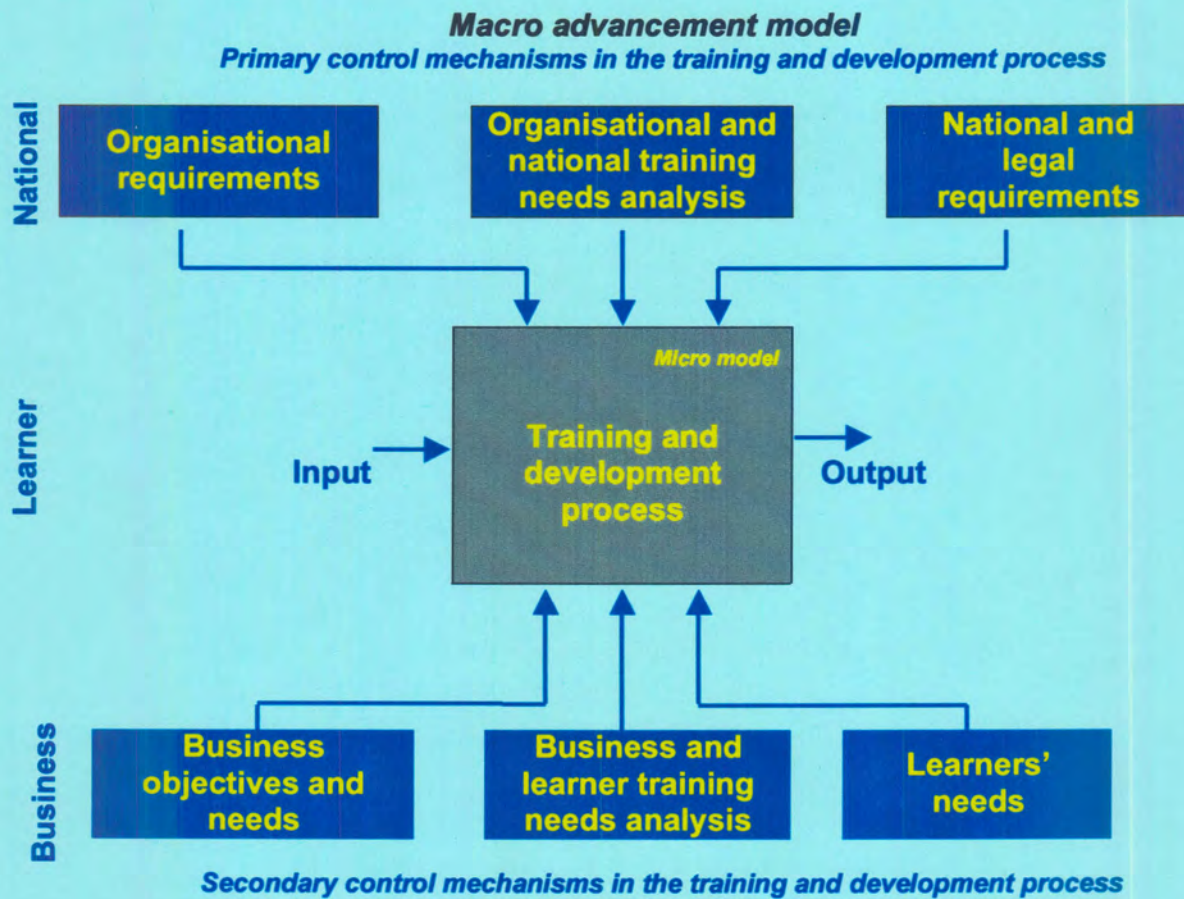




Chapter 4 Development



An experiential learning process for the advancement of previously disadvantaged employees in an industrial context – W.J. Cilliers

4 DEVELOPMENT

The purpose of the Skills Development Act is to develop the skills of the South African workforce to encourage the employers “to use the workplace as an active learning environment and to provide the employees with the opportunities to acquire new skills” (South Africa, 1998b: 8).

Chapter 3 reviewed the concept of action research and how it is implemented in a research environment. Chapter 4 explains how the literature and research methods influenced the development of the learning process for the advancement of the learners over the period 1995 to 1999. This chapter describes the processes and interventions developed by the researcher in order to investigate the main research question and the four subsidiary research questions.

Once the research problem and the motivation for this research project have been reviewed and the aim of the research established, this chapter will cover the design and development of the learning processes.

4.1 MOTIVATION FOR THIS STUDY

Prior to the publication of the *Green Paper on Skills Development* (South Africa, 1997a), a need emerged in industry to develop and implement a training and development delivery system that would provide learners with an opportunity for outcomes-based skills development. In addition, there is a need for a holistic development process to integrate the current training and development interventions in industry, as well as the related human resources practices that serve as a support mechanism for the system.

Currently training and development, human resources practices and administrative functions do not support one another as a system. The competencies acquired by the learner are not linked with any of the functions

or the alignment legally required at national and organisational level (Figure 4.1). Nonetheless, with the new legislative requirements as spelled out in the NQF (South Africa, 1995a), SAQA (South Africa, 1995a), the *Skills Development Bill* (South Africa, 1997a) and other national initiatives like the *Higher Education Bill* (1997b), the research proposal and solution to the problem can be identified in the context below and as illustrated in Figure 4.1.

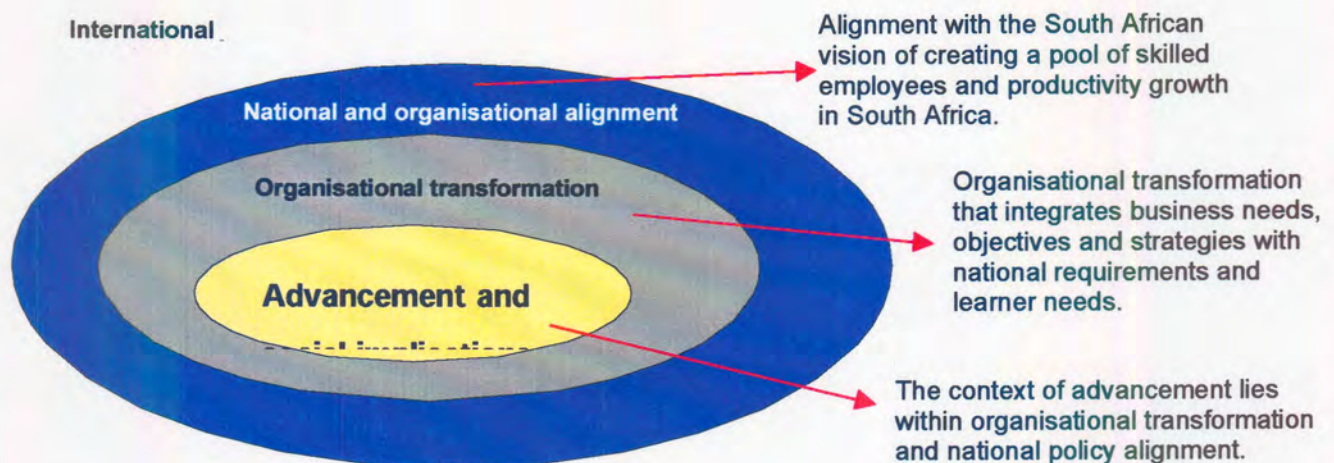


Figure 4.1 – An integrated and holistic view of this research proposal

As indicated in Figure 4.1, the training and development proposal originated at a national and legal level, incorporating the organisational transformational process to accommodate these changes and to develop and provide learning interventions to incorporate these changes into industry at three levels in practice.

National alignment sets out the legal requirements the organisation should address and with which it should align its business to fulfil the minimum requirements for competency development, assessment, declaration of competency and management of results (South Africa, 1995a; South Africa, 1995b; South Africa, 1998b). However, the advancement of outcomes-based training and development should occur within a training and development

process to ensure the integration of the organisational development process with the training and development process.

Although various competency-based training interventions were designed, developed and implemented by the researcher, the lack of a holistic and integrated process-driven outcomes-based development process for industry was identified as needing to be addressed within this context. While the researcher was planning training and development interventions for the learners, it became evident from the interviews and from informal observation and analyses that training and development practitioners at various levels had an explicit need for an outcomes-based career path and development (Appendix A). This should, however, occur in the context of the relevant experiential training requirements of the formalised and institutionalised sectors in the domains of general education, further education and higher education. In order to improve the training system for experiential training in industry, a number of interventions were initiated in the Eskom Transmission Group to enhance the development of an outcomes-based training and development process for technical skills.

At the end of 1995 and the beginning of 1996 the researcher designed and implemented various learning interventions and delivery structures by integrating the different components needed to deliver learning at various levels for the different disciplines in the Eskom Transmission Group. The delivery structures included various training interventions for the development of the learners, practitioners, equipment, facilities and learning material. As a consequence of the implementation of these training interventions, a number of lessons were learned and a number of thought-provoking questions were asked about:

- the *perception* of industry of the learning interventions designed and developed for the advancement of employees;

4.2 AIM OF THE RESEARCH

The aim of the research is to examine the experiential learning process and interventions in order to develop a theoretical training framework for enhancing the development of skills and competencies in the advancement of employees in industry. The focus is on the development of a work-related skills model to advance the effective utilisation and promotion of the employees in the working environment. Industry currently lacks a holistic training and development process to accommodate the enhancement of the required competencies (South Africa, 1997a; Eskom, 1997b).

The applicability of the components of the learning process determines the extent to which it will equip the learner and the practitioner with the skills necessary to complete the tasks expected of them in the processes concerned.

4.3 DEVELOPMENT CONTENT

The content of this chapter covers the development of the learning interventions in the following focus areas:

- | | |
|---|--|
| <i>National and organisational alignment</i> | <ul style="list-style-type: none">• This section covers the formulation of national policies and organisational alignment with these policies, taking in consideration the external forces that influence the process. |
| <i>Learner development</i> | <ul style="list-style-type: none">• This section covers the development of a competence menu with social integration to support employee advancement. |
| <i>Practitioner development</i> | <ul style="list-style-type: none">• This deals with essential development required for the practitioner to deliver the |

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4.3 DEVELOPMENT CONTENT

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- National and organisational alignment***
 - This section covers the formulation of national policies and organisational alignment with these policies, taking in consideration the external forces that influence the process.

- Learner development***
 - This section covers the development of a competence menu with social integration to support employee advancement.

- Practitioner development***
 - This deals with essential development required for the practitioner to deliver the learning interventions, and considers practitioner roles, skill levels and time commitment in the learning process.

- Learning process and systems***
 - This section considers learning process and system integration and the delivery of the learning interventions, as well as transformation of the process and project management support.

4.4 NATIONAL AND ORGANISATIONAL ALIGNMENT

This section on national and organisational alignment focuses on the following areas (Figure 4.2 and Figure 4.3):

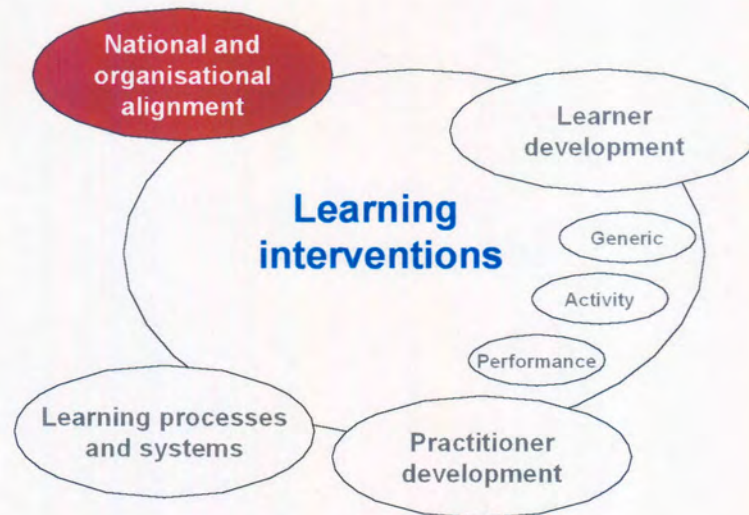


Figure 4.2 – Focus on alignment and legal requirements

- The formulation of the national alignment policies
- An organisational approach to accommodate the integration of the learning interventions with national policies
- Internal organisational alignment with the national policy requirements
- Eskom quality assurance assistance for learning interventions
- Social and learner alignment



Figure 4.3 – Overview of national and organisational alignment

As indicated in Figure 4.3, national and organisational alignment comprises five areas of development:

- The formulation of national alignment policies by aligning the organisation with the requirements prescribed by government legislation.
- An organisational approach to accommodating national policy alignment and integration as prescribed by legislation and the way the organisation aligns itself internally to comply with the legislative requirements.
- The organisation's (Eskom's) quality assurance interventions to support and ensure adherence to the requirements at a national and organisational level.
- The social development of the learner and the way in which national policies impact on him/her as a person.

However, the five developmental areas indicated in Figure 4.3 are not used as standalone units. The place and the validity of the alignment process are utilised in the context of the complete integrated system to support the other systems or processes. An integrated systems approach prevents the previously encountered silo-effect and eliminates individual or departmental initiatives encountered and evident in the training and development environment.

As shown in Figure 4.1, the research problem originated at national policy level, incorporating the organisational alignment transformation process to accommodate changes required by the *Skills Development Act* (South Africa, 1997a). The development and provision of an experiential learning process will bring about the required changes in industry in a practical way. Eskom will implement interventions at all three levels to achieve, integrate and align the dimensions described in Figure 4.1.

4.4.1 Formulation of national alignment policies

The alignment of the training process with national and legal requirements is founded on an outcomes-based approach. This addresses the integration and alignment at national level to comply with the legislative requirements laid down in various sources:

- The National Qualifications Framework (South Africa, 1995a)
- *The South African Qualifications Authority Act* (South Africa, 1995a)
- *The Skills Development Act* (South Africa, 1998b)
- Other national initiatives such as the *Employment Equity Act* (South Africa, 1998c)

The purpose of this legislation is to:

- increase the levels of resources in education and training (South Africa, 1998b);
- improve the return on the investment employers make in their employees (South Africa, 1998b);
- encourage workers to participate in learnerships and skills programmes (South Africa, 1998b);
- improve the quality of education and training in the workplace and to redress the inequities of the past (South Africa, 1998b);
- promote equal opportunities and fair treatment in the employment of workers (South Africa, 1998c).

Alignment with the national policies provides a guideline and structured framework for organisations to adhere to. This alignment ensures that purposeful and recognisable development with associated accredited qualifications is provided in the organisations.

4.4.2 Organisational approach to national policy alignment

Alignment at organisational level allows the organisation to develop structures and frameworks to enable it to comply with national policy guidelines and alignment with employees at a social level. Thus, organisational alignment works in two directions – alignment with national policies and alignment with the employee as a learner at a social level. The alignment of the process at organisational level comprises the following:

- The design, development, implementation and improvement of training and development interventions and frameworks (South Africa, 1998b)

- Modification of existing training and development infrastructure to comply with the national and legal requirements (Eskom, 1997b)
- The development of suitable, accredited, outcomes-based training and development interventions to the benefit of the employee (South Africa, 1998a)
- Recognition of prior learning (South Africa, 1998b)
- The development of skills programmes (South Africa, 1998b)
- The development of learnership programmes (South Africa, 1998b)
- The establishment of and participation by SETAs
- Provision for a skills levy (South Africa, 1998b)

In addition, the *Skills Development Act* (South Africa, 1998b) requires organisations to:

- use the workplace as an active learning environment;
- provide employees with opportunities to acquire new skills;
- provide opportunities for new entrants to the labour market to gain work experience;
- employ persons for whom it is difficult to find employment.

Organisational alignment and transformation complies with the above-mentioned requirements and aligns activities in order to integrate the organisation's business needs with national requirements. This alignment addresses not only the national requirements, but also the organisational business objectives and strategies. The integration of organisational transformation systems and requirements with these strategies serves to align the training and development process and organisational development change management interventions with national and legal requirements.

The national and organisational alignment incorporates the following elements into the experiential learning process and Eskom as an organisation complies with the legislation and legal requirements by addressing them:

- External forces
- Classification of fields of learning
- Alliances and partnerships
- SETA integration

4.4.2.1 External forces

The Skills Development Act (South Africa, 1998b) clearly authorises the establishment of the National Skills Authority (NSA) and Sector Education and Training Authorities (SETAs) in support of SAQA and NQF structures. Eskom as an organisation integrates the external influences and is forced to comply with the national requirements as indicated in Figure 4.4.

External forces: Departments of Education and Labour

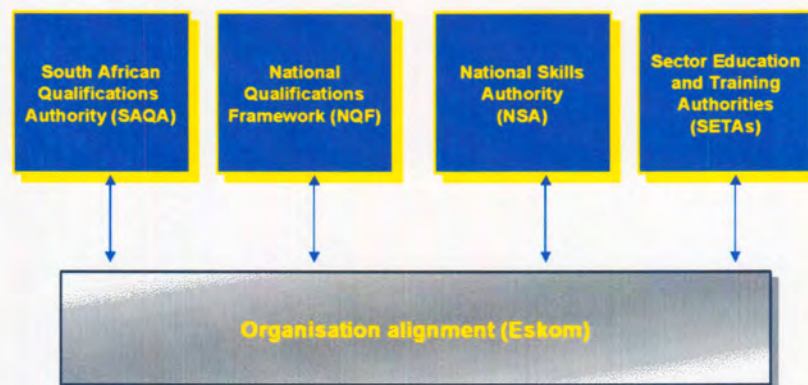


Figure 4.4 – External forces

As is evident from Figure 4.4, the external forces play an important role in industry in aligning training and development initiatives as required by the *Skills Development Act* (South Africa, 1998b), and so each of the external forces listed will be discussed. Once again, these external influences should be accommodated as a unit and not as individual entities.

- **SAQA influence on Eskom**

SAQA provides a framework within which to integrate the educational and vocational interventions in Eskom. The following functions were identified for the South African Qualifications Authority (SAQA) upon its establishment (African National Congress, 1994), and Eskom has aligned itself accordingly:

- Maintenance and quality assurance process in the qualifications system
- Accreditation, examination and certification authorities for all levels of education and training
- Continued and appropriate research and development programmes
- Co-ordination of all qualifications to an understandable level for the public and learners
- Establishment of mechanisms to oversee the regular review of standards
- Recognisable international and national qualifications

- **National Qualifications Framework influence on Eskom**

To develop sound, high quality education and training systems, industry needs to provide its employees with high levels of the skills and knowledge required by these systems. The National Qualifications Framework is designed to support the focus on and shift to quality.

Eskom's objectives under the National Qualifications Framework (South Africa, 1995a) are to:

- **accelerate education, training and employment opportunities in the organisation as a whole;**
- **contribute to the personal development of the employees as individual persons and learners;**
- **create an integrated framework for national learning achievements and recognition;**
- **enhance the quality of education and training in Eskom in relation to all levels of employees;**
- **provide elements within education, training and career paths to develop individual and personal development pathways.**

Eskom emphasises the future functions of a training and development learning system as follows:

- **The development with other organisations of a national curriculum based on integrated academic and vocational skills**
- **The development of a national standards and qualification structure that reflects the achievement of learning outcomes, defined at different levels from beginner to postgraduate, in terms of uniform national standards**
- **The integration of education and training systems at formal and non-formal levels**
- **The development of methods and systems for learners to accumulate credits for learning towards a national qualification and recognition**
- **Ensuring participation by all employees in the education and training system**

- Recognition for prior learning
- Recognition of the right to individual lifelong learning and the promotion of career paths

The qualifications and learning encountered by the employees are based on:

- defined learning pathways;
- qualifications for defined purposes and related to other qualifications;
- a proven system of history and record-keeping for flexibility, transferability of qualifications and progression within the system;
- recognised skills, knowledge, attitudes and values in all learners.

- **Role of the National Skills Authority (NSA)**

The Skills Development Act gives the following functions for the NSA (South Africa, 1998b):

- Development of the national skills development policy
- Development of the national skills development strategy
- Development of guidelines for the implementation of the above policy and strategy
- Allocation of subsidies from the National Skills Fund

In addition, the National Skills Authority also liaises with the Sector Education and Training Authorities in relation to (South Africa, 1998b):

- the national skills development policy;
- the national skills development strategy.

Eskom has adhered to the requirements by submitting a skills plan and strategy to the SETA as requested, indicating the various skills needed by Eskom. This skills plan also listed the critical skills identified in the organisation.

- **The role of Sector Education and Training Authorities (SETAs)**

The Skills Development Act lists the following functions for SETAs (South Africa, 1998b), which Eskom is complying with:

- Development of a sector skills plan in line with the framework of the national skills development strategy
- Implementation of the sector skills plan through the establishment of learnerships, approval of workplace skills plans, allocation of grants and monitoring of education and training in the sector
- Promotion of learnerships by identification of workplaces for practical experience, supporting the development of learning materials and improving the facilitation of learning in the organisations
- Registration of learnerships
- Collection and distribution of the skills development levies in its sector

The establishment and development of the SAQA and NQF infrastructures are at advanced stages, as the *SAQA Act* (South Africa, 1995a) came into force in 1995. However, members were appointed to the National Standards Bodies (NSBs) only in 1999.

4.4.2.2 Cross-departmental integration at national level

Three role-players are acknowledged in the national policy and organisational alignment for strategic planning of interventions and are accordingly incorporated into the Eskom structures. These role-players are the following (Figure 4.5):

- National standards bodies and standard generating bodies (NSBs and SGBs)
- Education and training quality assurers (ETQAs)
- Sector education and training authorities (SETAs)

The functions of these bodies are integrated with the guidelines and requirements of the National Qualifications Framework as outlined by the *SAQA Act (South Africa, 1995a)*. *The Skills Development Act (South Africa, 1998b)* also requires learnership programmes to include practical work experience of a specific nature and duration, as well as a structured learning component, which should be included in the organisation's curricula and training plans as part of the integration and cross-departmental initiatives.

As indicated in Figure 4.5, the NSBs and the SGBs provide the working standards at a national level and organisations need to realign their own training to accommodate these requirements. The ETQAs provide the necessary guidelines for the assessment and accreditation of training providers, moderators and verifiers to ensure an acceptable level of training and development in the workplace (South Africa, 1998b).

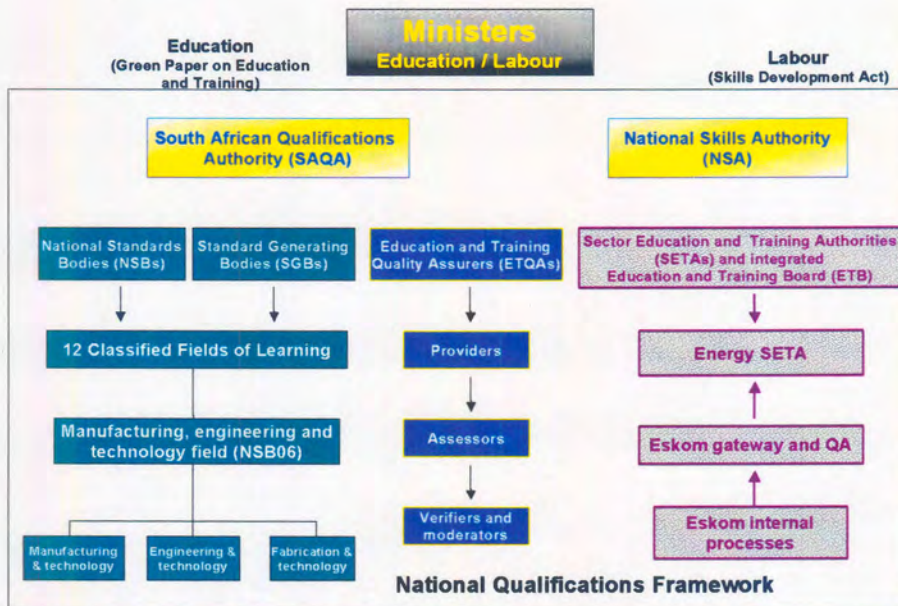


Figure 4.5 – Holistic view of SAQA, NQF and NSA integration (South Africa, 1995a; South Africa, 1995b; South Africa, 1998b)

Eskom, supported by its internal quality assurance bodies, has formed alliances and partnerships with other organisations in the manufacturing field co-ordinated by the SETAs. SAQA and the NSA are backed by the NQF, which acts as the assurer of quality between the Departments of Education and Labour.

4.4.2.3 Classification of 12 organising fields of learning

The classification of fields of learning provides a framework whereby the different occupations and work categories (South Africa, 1998a) are classified in 12 fields, as indicated in Figure 4.6.

Fields of learning

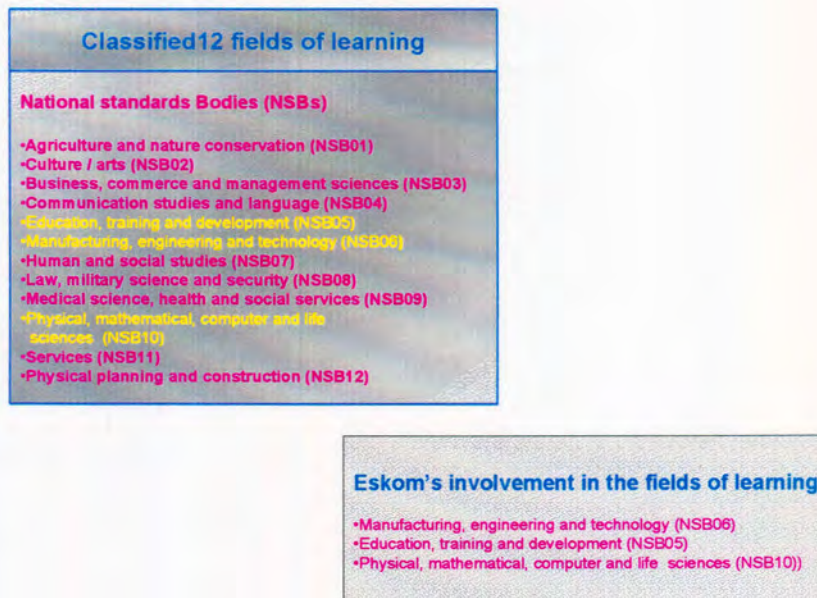


Figure 4.6 – Classification of the fields of learning

As indicated in Figure 4.6, Eskom is actively involved in three of the 12 organising fields of learning within the NQF (South Africa 1998a). The majority of the Eskom workforce falls into the following three main fields:

- Manufacturing, engineering and technology (NSB06)
- Education, training and development (NSB05)
- Physical, mathematical, computer and life sciences (NSB10)

Eskom is also active in other fields, but since its involvement in those fields is not significant it participates in them on an individual basis as necessary.

4.4.2.4 Alliances and partnerships

An organisation like Eskom establishes various alliances and partnerships with other organisations to reduce the workload and to prevent the rewriting or

reinvention of standards already in existence. In addition, this prevents Eskom from becoming dominant in other fields and enables smaller organisations with fewer resources to participate and contribute effectively. Eskom, for example, is not involved in the agriculture and nature conservation standards bodies, but contracts in any services it requires from the other standards bodies (South Africa, 1995a; South Africa, 1998b). The following are some of the benefits of these alliances and partnerships (South Africa, 1998a):

- Co-operation between government, organisations and other key stakeholders
- Development of a system to balance the roles of market-related skills and government and organisational initiatives
- Acceptance of the importance of inter-departmental co-operation between the partners and key stakeholders
- Information-sharing and consultation with one another

4.4.2.5 SETA participation

At present 27 SETAs have been identified, as indicated in Figure 4.7. SETAs are currently operating at three levels:

- Active and agreed
- Active but not agreed
- Development work required

The active and agreed SETAs are the groups and partners that are at an advanced level of establishment and development (South Africa, 1998b) on the basis of their:

- using similar materials, processes and technologies;
- making similar products;

- rendering similar services.

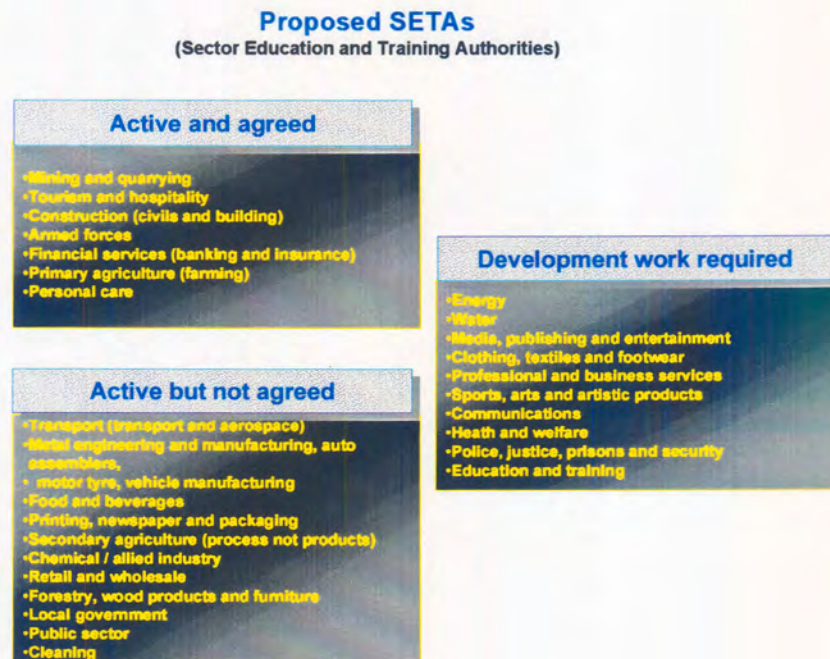


Figure 4.7 – Proposed SETAs

The active but not agreed SETAs and those requiring development work still need to establish the following (Figure 4.7):

- The potential of the proposed sector for coherent occupational structures, learnerships and career pathing
- The scope of any national strategies in the fields concerned
- Consensus between organised labour, organised employers and relevant government departments
- The financial and organisational ability of the proposed sector to support a SETA

4.4.3 Internal organisational alignment

4.4.3.1 Strategic and legislative level

Alignment at the strategic and legislative level relates to Eskom's approach to relevant legislation. The company set up special working groups to determine the impact of each of the relevant legal documents on Eskom as an organisation. The documents considered in this exercise were the following:

- *The SAQA Act* (South Africa, 1995a)
- *The Skills Development Act* (South Africa, 1998b)
- *The Employment Equity Act* (South Africa, 1998c)
- *The White Paper on Education and Training* (South Africa, 1995b)
- *The Higher Education Bill* (South Africa, 1997b)
- *The White Paper on a Programme for the Transformation of Higher Education* (South Africa, 1997d)

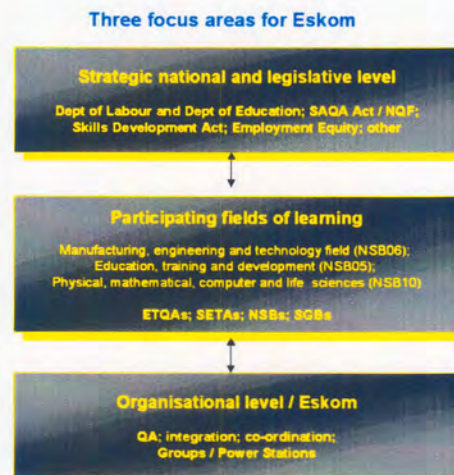


Figure 4.8 – Eskom focus areas

Figure 4.8 clearly illustrates the gap between the national and organisational level that needs to be bridged by means of participation in the other fields of learning, SETAs and the establishment of alliances and partnerships if national policy and organisational alignment is to be achieved.

4.4.3.2 Participation in the classified fields of learning

Eskom plays an active and leading part in certain of the classified fields of learning, as previously mentioned, as these are the fields into which the bulk of Eskom's employees fall. Eskom's participation features in the following fields in particular:

- Manufacturing, engineering and technology (NSB06)
- Education, training and development (NSB05)
- Physical, mathematical, computer and life sciences (NSB10)

Further participation by Eskom employees is encouraged in order to represent the minority employers in the other fields of learning.

4.4.3.3 Internal alignment with organisational objectives

South Africa is regarded as having one of the most biased distributions of income and skills in the world (BMI Issues Management, 1997). As BMI Issues Management puts it: "... the fastest growing part of the population falls into the unskilled labour category, compared with the much smaller skilled sector, which grows at a much slower rate" (BMI Issues Management, 1997:3).

This unequal distribution of skills leads to critical skill shortages in South Africa. According to BMI Issues Management (1997), the solution to this problem lies in education, training and development. South Africa has been taking steps towards solving the problem through the establishment of the National Qualifications Framework (NQF) and the South African Qualifications Authority (SAQA) and promulgation of the *Skills Development Act* in 1998. However, according to BMI Issues Management (1997), organisations and

businesses also need to work towards solving this problem by developing the systems and resources to do so.

As became clear from the literature review, organisations need to align their various training and development initiatives to comply with the following objectives indicated in the literature (South Africa, 1997a; South Africa, 1997b; South Africa, 1995b; ANC, 1994; BMI, 1997):

- To create an integrated national framework for learning achievements
- To facilitate access to training and development for all employees
- To enhance the quality of education, training and development

The National Qualifications Framework (NQF) acts as a facilitating body for the development, implementation and quality assurance of SAQA initiatives. The participants in this framework publicly register qualifications and unit standards to ensure similar standards in qualifications. The NQF has three structural elements (South Africa, 1995a):

- The South African Qualifications Authority (SAQA)
- National Standards Bodies (NSBs)
- Education and Training Qualifications Authorities (ETQAs)

Figure 4.9 indicates the approach Eskom is using to align the organisation with the national and legal requirements mentioned previously. The focus of this alignment falls on:

- the organisational context;
- the national context;
- learning systems;
- human resources initiatives.

A quality assurance body supports these focus areas by accommodating accreditation, assessment, evaluation and co-operation with the NSBs and ETQAs (Figure 4.9).

Eskom's national and organisational alignment complies with the legal requirements at the national and organisational levels (Figure 4.9) in relation to the NQF, *SAQA Act*, *Education Bill*, *Skills Development Act* and other national initiatives (South Africa, 1995a; South Africa, 1995b; South Africa, 1997b). Figure 4.9 illustrates the way in which the organisation addresses and aligns its business to ensure that it:

- complies with the minimum requirements for competence development;
- is able to assess practices and standards;
- can issue a declaration of competence;
- is in a position to manage results.

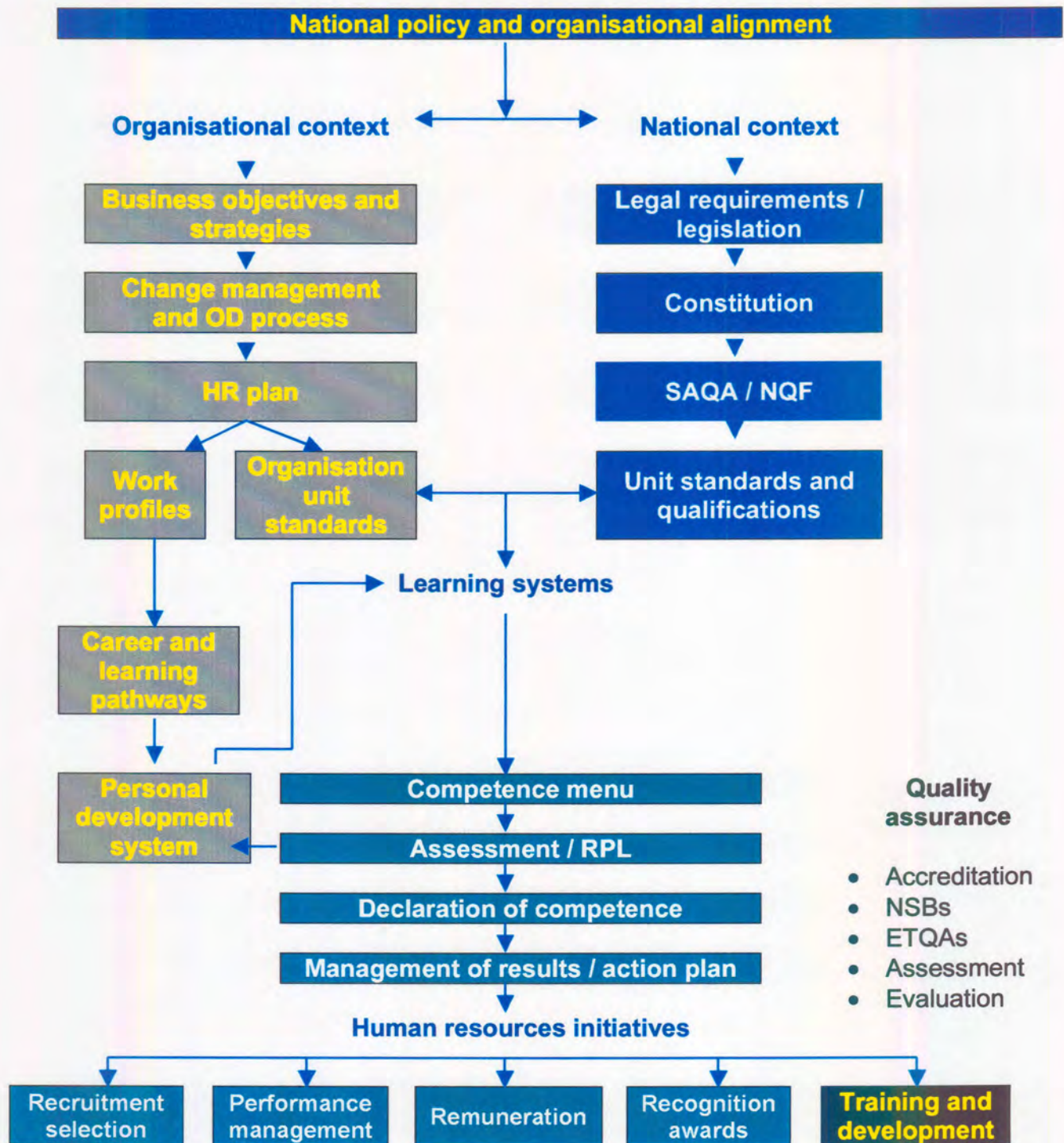


Figure 4.9 – Alignment and integration at national and organisational level, adapted from the *Eskom Practitioner Guide* (Eskom, 1997a)

The internal organisational alignment occurs in three phases (Figure 4.9):

- Organisational and national context
- Learning systems
- Human resource initiatives

- **Organisational and national context**

Eskom as a business has aligned itself with the national requirements and in relation to its business objectives and strategies by implementing appropriate change management and organisational processes to oversee transformation to the desired business and working culture. The national unit standards and qualifications were used to develop Eskom's internal standards and work profiles (Figure 4.9).

- **Learning systems**

The learning systems provide for career and learning pathways and personal development systems. The competence menu provides for assessment, recognition for prior learning, declaration of competence and the management of results and action plans. Eskom's internal quality assurance provides the standards, guidelines and procedures necessary to accommodate (Figure 4.9):

- accreditation;
- assessment;
- evaluation.

- **Human resource initiatives**

Recruitment and selection, performance management, remuneration and recognition awards fulfil an important role in the context of the business and organisational objectives by providing the necessary

opportunities for the development of a competent workforce. However, this outcomes-based training and development takes place within the framework of the training and development process in order to ensure the integration of the organisational and business objectives with the training and development process (Figure 4.9).

As indicated in Figure 4.9, Eskom as an organisation has aligned itself with the national and legal requirements and parallels this with its organisational and business goals. Once again illustrated by Figure 4.9, the various processes and systems cannot work independently from each other, but need to work as a unit to ensure correlation and interaction between the different departments and disciplines involved in the system.

4.4.3.4 Organisational transformational integration

Organisational transformational integration focuses on two domains in human resources development (Figure 4.10):



Figure 4.10 – Components of human resources development (Rothwell & Kazanas, 1994a)

The integration of organisational development and training and development are essential for business to succeed in implementing the national policy and legal requirements in an organisation (Rothwell & Kazanas, 1994a; Rothwell & Kazanas, 1994b) (Figure 4.11). The literature shows that attempts are often made to have development initiatives as independent entities, creating a silo

effect and interdepartmental initiatives. This type of practice does not support an integrated solution to training and development or human resources development initiatives.

The solution to the problem within Eskom was to integrate the various actions in a process and system that ensures co-operation between the different disciplines and departments, as indicated in Figure 4.11. The process was divided into two focus areas of responsibility:

- Organisational development and change management
- Training and development

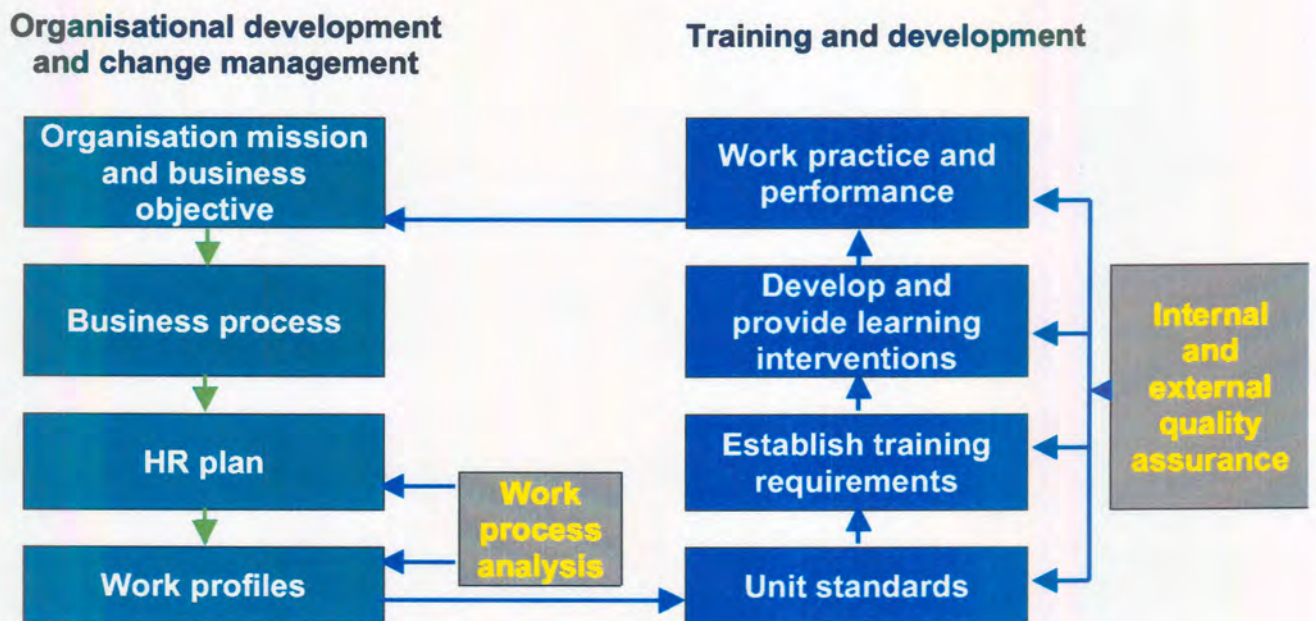


Figure 4.11 – Outcomes-based training and development map adapted from the *Eskom Practitioner Guide* (Eskom, 1997a)

These two focus areas incorporate the organisation's mission and business objectives. The business processes together with the human resources plan provides the framework for the development of generic and specific work and job profiles. From these, the work process analysis establishes the environment for training and development, providing the requirements for development of Eskom unit standards in line with the national unit standards

and the delivery of learning interventions. This approach results in the implementation of integrated work practices and performances. The training and development comply with the minimum requirement set by internal and external bodies to ensure that a high-quality service is provided.

4.4.4 Eskom quality assurance interventions

4.4.4.1 Eskom and national requirements integration

This research has identified two main components for external alignment (Figure 4.12) with national and organisational policies:

- Eskom requirements
- National requirements

The Eskom requirements include its internal quality assurance system and learnerships and skills programmes. The Eskom requirements thus have two legs: corporate quality assurance and learnerships / skills programmes. Corporate quality assurance covers corporate functions like the verifiers, moderators and uniformity of standards generated by Eskom, while the learnerships and skills programmes provide the necessary outcomes, Eskom unit standards, roles and work profiles for each discipline involved in the process. The national requirements include links to NSBs, SETAs and the National Qualifications Framework. The Eskom working unit standards have to pass assessment by a quality assurance body (Eskom gateway) to ensure an acceptable level of unit standards leaving the organisation and that these unit standards are in line with the national unit standards and link up with the NQF.

4.4.4.2 Eskom quality assurance alignment

The Eskom alignment requirements include the way in which the Eskom corporate department manages the alignment in terms of quality assurance and the development of the learning delivery instruments (Figure 4.12). This intervention includes Eskom quality assurance processes, procedures and directives. The corporate quality assurance function also oversees the development of the learnership and skills programmes. This unit ensures alignment and compliance with the NQF in relation to development work associated with the learnerships, skills programmes and the development of the practitioners responsible for the quality assurance function.

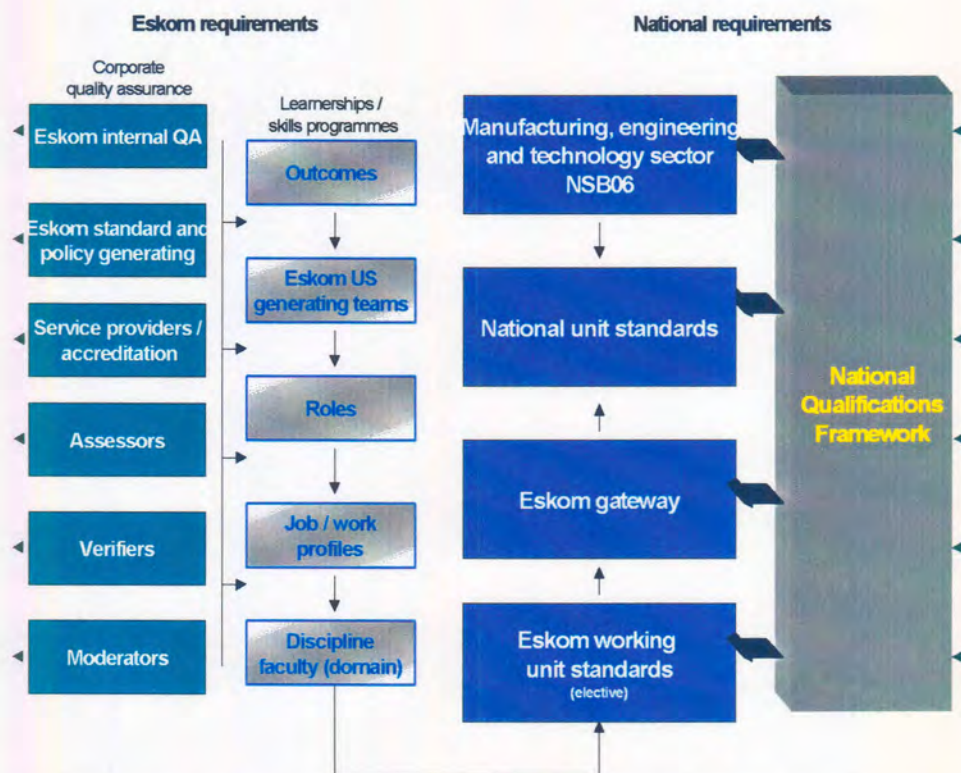


Figure 4.12 – Eskom QA and integration process

An important function of the quality assurance process is the evaluation, assessment and accreditation of the internal and external service-providers. This ensures that the learning material complies with minimum requirements

set by the NQF and the organisation. The quality assurance body also takes over the role of the former Eskom and Allied Industries Training Board (EAITB) in terms of making recommendations to the NSB and SETA regarding qualifications and certificates of competence for appropriately assessed employees.

- **Learnership and skills programmes**

The learnership programmes have the following crucial features (South Africa, 1998b) (Figure 4.12):

- They consist of structured learning elements.
- They include practical work experience of a specific nature and duration.
- Learnerships lead to a national qualification and are related to an occupation.

Features of the skills programmes include the following (South Africa, 1998b):

- Skills programmes are occupationally based.
- When completed, skills programmes contribute towards credits for a nationally recognised qualification.
- These programmes use recognised and accredited providers.

The Eskom quality assurance body has assessed and accredited the line groups as service-providers for the development and implementation of proposed learnership and skills programmes.

- **NSB, SETA and National Qualifications Framework links**

Eskom requirements are aligned with the national and SETA requirements in terms of skills development and include (South Africa, 1998b):

- research and analysis of the national and Eskom labour market and requirements;
- skills development in line with the SETA skills plan.

In addition, the national requirements include an interface with the National Qualifications Framework and the organisational (Eskom) requirements (Figure 4.12).

4.4.4.3 Eskom internal group integration and alignment

Eskom's internal group integration comprises the following elements (Figure 4.13):

- Eskom's corporate role
- Eskom and national integration
- Line group participation

Eskom QA and integration - corporate and line focus

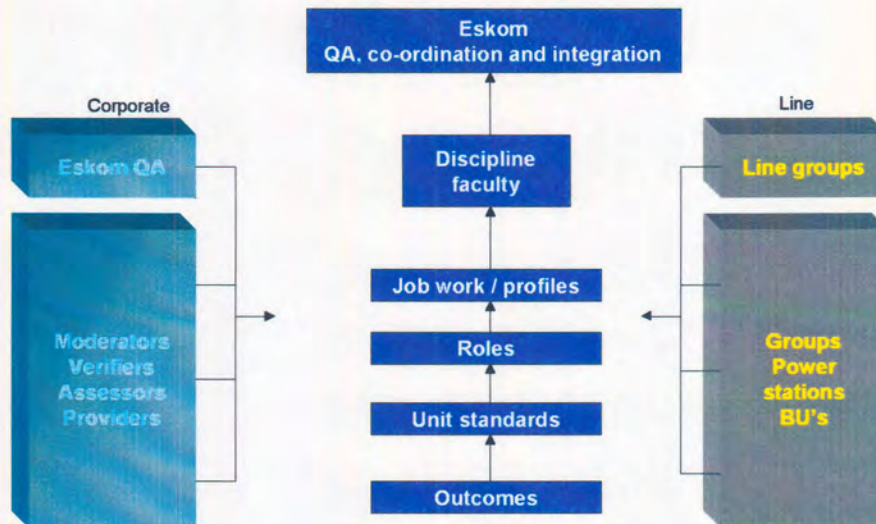


Figure 4.13 – Eskom internal group integration

As indicated in Figure 4.13, close relationships exist between corporate and line functions to ensure uniformity and quality assurance in Eskom.

- **Eskom’s corporate role**

As previously discussed, Eskom Corporate Services provides the necessary direction in terms of policies, guidelines and practices. Corporate Services provides the training and development for the moderators, verifiers and assessors and the accreditation of providers (Figure 4.13). This function ensures that the line groups comply with the requirements in relation to corporate quality assurance and alignment with national policy requirements.

Eskom provides a quality assurance service at a corporate level to ensure compliance at a national level as well as internally (Figure 4.13). As indicated in Figure 4.13, the quality assurance function provides for the setting of standards and generation of guidelines and

policies in Eskom. This includes the registration, training and development of the assessors, verifiers and moderators. The quality assurance function also monitors alignment with and participation by other bodies and organisations at a national level (South Africa, 1998b).

- **Line group participation**

The line groups and business units are responsible for the development of job and work profiles, roles, unit standards and specific outcomes in line with the corporate directives, policies and guidelines. The unit standards are submitted to the Eskom corporate quality assurance body for accreditation and compliance. This corporate function ensures equal and uniform standards within the organisation for the work developed by various groups and individuals (Figure 4.13).

4.4.5 Social and learner alignment

Social integration or employee advancement focuses on an outcomes-based process and the implementation of learning interventions developed to suit the social characteristics of the employee.

The Skills Development Act (South Africa, 1998b) emphasises involvement on the part of both the employer and the learner in relation to:

- participation in learnerships and other training programmes;
- assisting workers to participate in learnerships;
- participation in skills development programmes.

The integration of the training and development delivery process accommodates the social development needs of the learner. The main advantage of the alignment between social development and the employer is

the focus on self-development and lifelong learning as spelled out in the *Skills Development Act* (South Africa, 1998b) to the benefit of the learner. The development of a learning intervention framework focuses on the needs of the employee as a learner, results in higher quality of standards and methods applied within the development framework and enhances the social development of the employee within the organisation.

The main advantage of alignment between social development and the learner is integration and alignment with the organisational requirements and change management process to accommodate learner development. The alignment of social development and learner interventions results in a higher quality of standards and methods being applied within the training and development framework.

4.4.6 Action undertaken as part of the analysis and developments aimed at national and organisational alignment

The following interventions were analysed, designed, developed and/or implemented to align the organisation with national requirements:

- Provisional evaluation of the current status of training and development in the Eskom Transmission Group
- Eskom Transmission Group HRD strategic planning session
- Training needs analysis
- Strategic HRD session
- Eskom Transmission Group HRD strategic development and restructuring
- Eskom Transmission Group HRD strategy
- Analysis of the ABET environment in South Africa

4.4.7 Summary: National and organisational alignment

This section has described in detail the alignment initiatives undertaken over a five-year period to investigate and address current practices by assessing them in relation to external organisations and legislation and determining the training and development gap. The need for serious and radical changes in the way organisations handle their employees' personal training and development has been highlighted by descriptions of:

- the approach that should be taken in relation to national and organisational alignment and the context in which this should occur;
- the way in which an organisation should align its development objectives by taking external forces into consideration as a major partner in the alignment;
- cross-departmental dynamics at a national level between the Department of Education and Department of Labour;
- alliances and partnerships between the SETAs, NSBs, SAQA, NQF and other organisations;
- external alignment in relation to internal organisational alignment and the integration of these elements with current and new practices;
- the dual functionality of the internal organisational quality assurance function and its role in protecting the rights of the organisation and those of the employee by ensuring adherence to national legislative requirements;
- the establishment and implementation of learnership and skills programmes in the organisation.

Last, but not least, it was suggested that the social integration of the employee as a learner and alignment in this regard could be ensured by:

- reviewing the ABET environment and providing a framework for evaluating learner development in the organisation;
- provisional evaluation, strategic planning and analysis of training needs to determine the training and development gap in the organisation;
- using the group HRD strategic development and restructuring to develop a framework for organisational alignment;
- initiating working groups to implement national initiatives in the organisation;
- undertaking formative evaluation of training and development interventions that have been implemented.

4.5 LEARNER DEVELOPMENT

This section describes the interventions related to learner development that were developed by the researcher in order to investigate the second subsidiary research question (Table 4.14) on learner development.

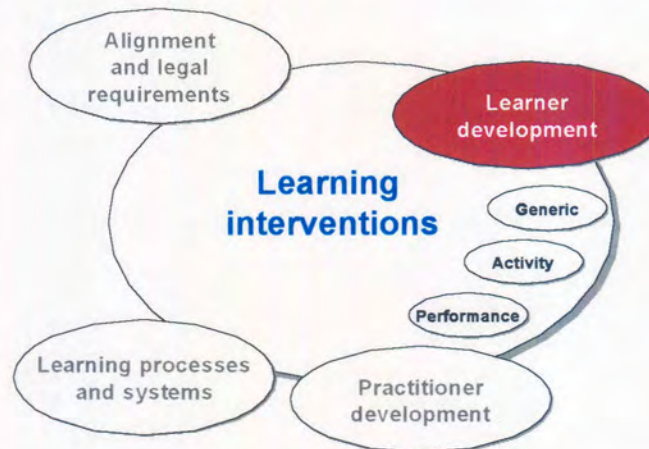


Figure 4.14 – Learner development

The focus in regard to learner development is on specific development of the learner and the type of interventions implemented to develop the employee as an individual (South Africa, 1998b). This learner development is also aimed at helping to create a culture of lifelong learning and getting the learner to take responsibility for his or her own development, as stipulated in the *Skills Development Act* (South Africa, 1998b). Learner development focuses on the learning pathways and skills development programmes, and includes development in five areas identified during the analysis, design, development and implementation of the different levels of learnership and skills programmes, namely (Figure 4.14 and Figure 4.15):

- Institutional
- Legal
- Personal growth objectives

- Leadership development
- Group and business unit-specific

The skill levels identified above are in turn each broken down further in terms of complexity and comprise (Figure 4.14 and Figure 4.15) –

- fundamental;
- core; and
- elective

levels of competence.

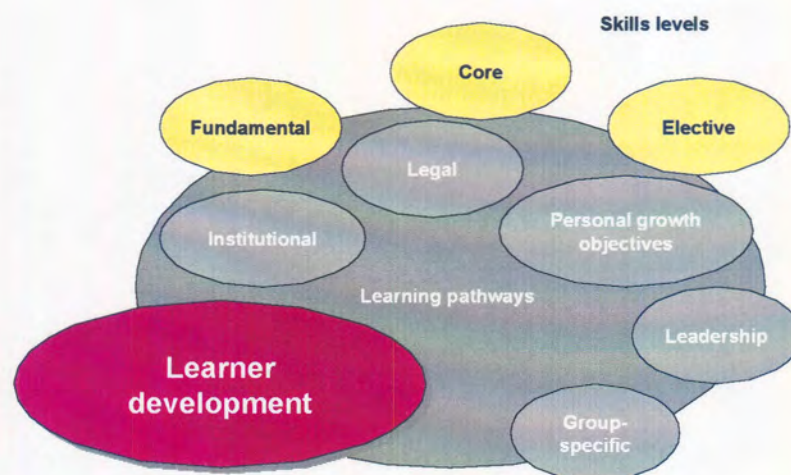


Figure 4.15 – Overview of learner development

In complying with the national policy and organisational requirements for specific training and development, the first two levels (fundamental, core) accommodate the national unit standards as registered with SAQA (South Africa, 1995a; South Africa, 1995b). The third level (elective) is a more specialised level to meet the needs of individual organisations and to cater for more specific equipment and work practices related to a certain working environment, culture or demographics.

Under the banner of learner development, the learning pathways, curricula, training programmes and training plans complement the development of the learner in his / her totality. The learning pathway development takes place at the levels discussed previously (Figure 4.15) and accommodates the requirements of the *Green Paper on Further Education and Training* (South Africa, 1998a). The following critical and development outcomes can be elicited from learner development programmes (South Africa, 1998a):

- Communication skills
- Cultural and aesthetic understanding
- Entrepreneurial skills
- Learning skills
- Problem-solving skills
- Research skills
- Self-responsibility
- Team work
- Technological and environmental literacy

4.5.1 Competency development menu

The learning pathway for the learnership and skills programmes designed to help develop Eskom employees' competency comprise the following levels (Figure 4.16):

- Competency development
- Social integration

Competency development focuses on the development of the learner in the workplace, while the social integration aspect provides the learner with skills that can be used in the workplace as well as in the social environment. The

social integration aspect also provides learners with skills that can be utilised to prepare for retirement. The qualification obtained by the learner fulfils the following criteria (South Africa, 1998a):

- It represents a planned combination of learning outcomes.
- It adds significant value to the qualifying learner.
- It provides benefits for society by enhancing citizenship.
- It complies with the objectives of the NQF.
- It has both specific and specialised cross-field outcomes that promote lifelong learning.
- It is internationally compatible and transferable where appropriate.

4.5.1.1 Competency development

Learning pathways have the following levels of skills:

- Fundamental level**
- The fundamental level addresses the development of a foundation for specific disciplines, but is still generic to other disciplines where applicable. As the *Green Paper on Further Education* (South Africa, 1998a: 4) states, "Fundamental learning forms the grounding or the basis needed to undertake the education, training or further learning required in obtaining a qualification".
- Core level**
- This level bridges the gap between the fundamental and elective levels, accommodating skills already mastered by the learners without any recognition being given for competencies applied and utilised in the workplace. *The Green Paper on Further Education* (South Africa, 1998a: 4) states, "Core

learning is compulsory in situations contextually relevant to the particular qualification" on a theoretical and practical basis.

Elective level

- The elective level addresses the development of the learner in a more specialised environment and this approach also accommodates the specific needs of the environment in which the learner is currently employed. Electives are selected additional credits at the NQF level specified, to ensure that the qualification is competency- and outcomes-based (South Africa, 1998a).

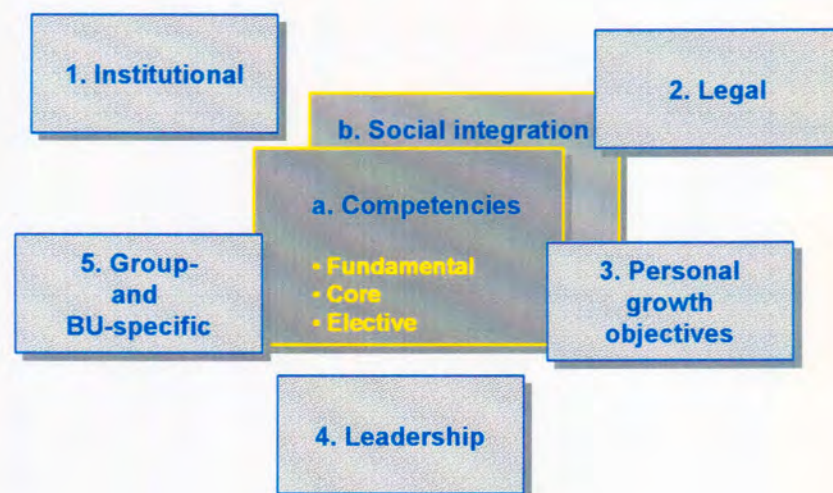


Figure 4.16 – Competence menu

Figure 4.16 shows a breakdown of the structure of the learner development process and focuses on two areas of development: learning pathways and skill levels, which are based on competencies applied and demonstrated in the workplace. The courses and development initiatives can take place in any

of the five categories and can provide training at a fundamental, core or elective level.

4.5.1.2 Social integration

Social integration training is not directly business or organisation-related, but aims to improve the personal life skills of the employee. This leads to empowered communities that in turn become powerful allies to organisations. Training in this regard is particularly relevant to employees who are nearing retirement. Below are some examples of courses of this type.

- Alcohol abuse
- Banking
- Cultural diversity
- Entrepreneurship
- Family relationships
- Financial
- Health and well-being
- Insurance: Medical short-term
- Interpersonal relationships
- Investments, annuities
- Personal budget
- Personal hygiene
- Small business development

Competency and social training can be accommodated simultaneously and there are no entry prerequisites for either of the two areas of development.

4.5.2 The development of the competency menu

The competency development menu comprises development at the five levels (institutional, legal, personal growth objectives, leadership development and group-specific) shown in Figure 4.16.

4.5.2.1 Institutional training

Institutional training accommodates the formal development of the learner, with service-providers within and external to Eskom providing the training. The learner can obtain a formal qualification from any one or a combination of institutions or providers. Most of the learning utilises a classroom-based approach. However, the practical application of the new skills obtained takes place in a Group and BU-specific context. Institutional training covers the following:

- ABET
- Bridging training
- Eskom College training
- Formalised training
- Technical college training
- Technikon courses
- Other training that might be identified

<i>Course type: Institutional training</i>	<i>Fundamental</i>	<i>Core</i>	<i>Elective</i>		
			<i>Generic</i>	<i>Activity</i>	<i>Performanc</i>
ABET level 1	●				
ABET level 2		●			
ABET level 3			●		
ABET level 4			●	●	
Basic safety	●	●	●		
Bridging training (pre-N1)				●	
Eskom College training (basic skills)			●	●	
Formalised training (electrical, mechanical courses)			●	●	
Technical college (N1; N2; N3)				●	●
Technikon (pre-S1; S1; S2; S3; S4)					●

Table 4.1 – Institutional training

As indicated in Table 4.1, institutional training and development accommodates learners from the level of no or low skills to an advanced level, where the learner can eventually attend a more formal institution such as a technikon or a university. The potential and enthusiasm of the learner determine the limit to which such a learner can progress. However, a careful balance should be maintained between the amount of formal training received and on-the-job experience on the part of the learner.

4.5.2.2 Legally required training

The legally required training is conducted in accordance with Eskom's, national and legal requirements. The training may either be Eskom generic training or apply only to a specific Group / BU. The following are examples of legally required training:

- Environmental courses
- Fire-fighting
- First aid

- Safety
- Other training that might be identified, for example driver training and AIDS awareness

<i>Course type: Legally required training</i>	<i>Fundamental</i>	<i>Core</i>	<i>Elective</i>		
			<i>Generic</i>	<i>Activity</i>	<i>Performance</i>
AIDS awareness training	●	●	●	●	●
Environmental courses	●	●			
Fire-fighting	●	●			
First aid	●	●	●		
Safety	●	●	●	●	●
Other, e.g. driver training, defensive driver training			●	●	●

Table 4.2 – Legally required training

The working environment and skills level (Table 4.2) of the learners concerned will dictate the different levels (fundamental, core and elective) of legally required development. Some areas may not require the learner to have a driver's licence, for example, while in other fields of work at least advanced or defensive driving skills may be expected of the learner. However, the majority of the courses listed have a minimum (fundamental) level set for organisations to comply with the national policy guidelines.

4.5.2.3 Personal growth objectives

Personal growth objectives develop the business, social and personal needs of the learner. This training supports social upliftment and benefits his / her own development. A natural outflow from those skills is transferred to his / her direct community environment. Personal growth objectives include training interventions like the following:

- Applied administration

- Changing world of work
- Computer literacy
- Conditions of service
- Cost awareness training
- Financial survival kit
- Performance management
- Social integration
- Other training that might be identified

<i>Course type: Personal growth objectives</i>	Fundamental		Elective		
	Core	Generic	Activity	Performance	
Applied administration	●	●	●		
Changing world of work		●		●	
Computer literacy	●	●	●		
Conditions of service			●		
Cost awareness training				●	
Financial survival kit				●	●
Performance management			●	●	●
Social integration	●	●	●	●	●

Table 4.3 – Personal growth objectives

Personal growth objectives enhance the learner's performance in his / her working environment and should influence his / her personal and home life as a direct spin-off from the training. As is evident from Table 4.3, the learner uses these courses mostly in his / her direct working environment. Social integration training caters for the more personal needs encountered by learners nearing retirement, as shown in the earlier discussion of social development.

4.5.2.4 Leadership development

Leadership development training interventions prepare the learner for a formal and focused leadership programme. The leadership development context is used as a screening process to identify future leaders and to direct their future development. In addition, this exposure aims to provide the learners with a better understanding of basic leadership principles and business processes. The leadership development component includes training interventions such as the following:

- Applied administration
- Conflict handling
- Financial skills
- Negotiation skills
- Performance management for teams
- Other training that might be identified

<i>Course type: Leadership development</i>	<i>Fundamental</i>	<i>Core</i>	<i>Elective</i>		
			<i>Generic</i>	<i>Activity</i>	<i>Performance</i>
Applied administration	●		●		
Conflict handling	●	●	●	●	
Financial skills	●	●	●	●	
Negotiation skills	●	●	●	●	●
Performance management for teams			●	●	●

Table 4.4 – Leadership development

The leadership development (Table 4.4) serves as an introduction to potential and future leaders.

4.5.2.5 Group / business unit (BU)-specific

The aim with this training is to provide learners with the opportunity to acquire specific Group / business unit (BU) skills, cultural attributes and work procedures related to their direct work environment. This type of training also provides the Groups and BUs with the flexibility and ownership to develop the skills and needs required. Group and business unit-specific training interventions include elements such as the following:

- Business unit environmental performance
- Business unit induction
- Disciplinary code and procedures
- Grievance procedures
- Group / business unit policies
- Performance outputs
- Work procedures
- Other training that might be identified

<i>Course type: Group and business unit-specific</i>	<i>Fundamental</i>	<i>Core</i>	<i>Elective</i>		
			<i>Generic</i>	<i>Activity</i>	<i>Performance</i>
Business unit environmental performance	●	●	●	●	●
Business unit induction			●	●	
Disciplinary code and procedures			●	●	
Grievance procedures			●	●	
Group / business unit policies			●	●	
Performance outputs			●	●	●
Work procedures			●	●	●

Table 4.5 – Group and business unit-specific training

The group and business unit-specific training (Table 4.5) provides the learner with the development required for working in and contributing to his / her direct working environment. The training provided will depend on the specific application of the learner's skills and potential and expected performance.

4.5.3 Learnership development

Development by means of a learnership accommodates learners from diverse entry points in relation to work experience and qualifications. Each level includes development at the fundamental, core and elective levels. In addition, each of the levels covers the five focus areas of institutional, legal, personal growth objectives, leadership and group and business unit-specific training and development (Figure 4.17).

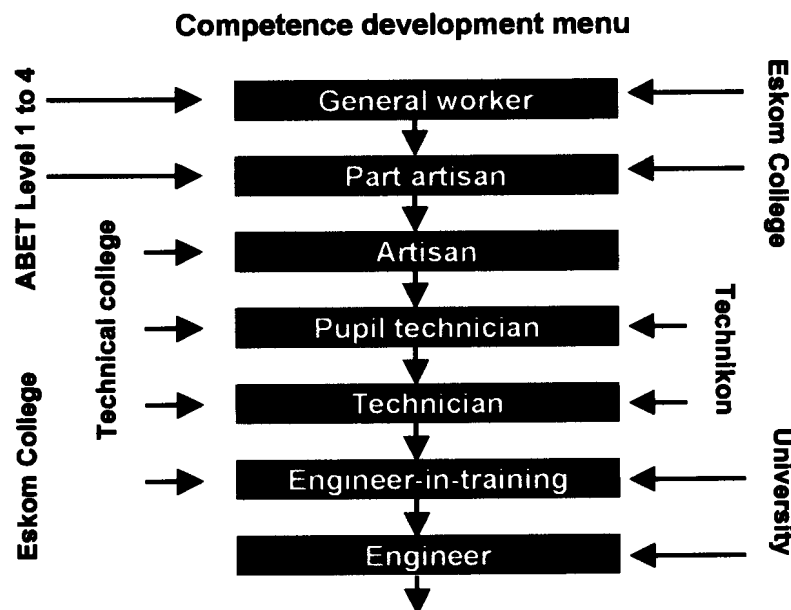


Figure 4.17 – Learnership development programme

The training and development are provided from different sources and are compatible with each other. As shown in Figure 4.17, the employee enters as a learner at a given and pre-assessed entry point and can exit at whatever level his or her ability and potential allow. The development is supported by

formal institutions such as Eskom College, technical colleges, technikons and universities.

4.5.4 Interventions implemented as part of the analysis of learner development

The following interventions was developed and implemented as part of the learner development initiative:

- Competence development for Engineering Resources
- Eskom Transmission Group A and B band development
- Engineering technician development
- Engineer development

4.5.5 Summary: Learner development

This section has described the situations that directly involve the learner and are the most tangible and perceptible to the learner, which include the following:

- Development of a competency development programme with five focus areas: institutional, legal, personal growth objectives, leadership development and Group and business unit-specific training and development
- Development of three levels of complexity for learning in each of the focus areas: fundamental, core and elective learning
- Social integration and preparedness of the learner
- A holistic approach to career path development

The following interventions formed part of the research related to learner development:

- **Analysis of different disciplines and profiles**
- **Design of curricula, training plans and programmes**
- **Development of learning interventions with working groups from the line organisation**
- **Implementation of interventions for different disciplines and employees**
- **Formative evaluation and assessment of progress made by employees and within learning systems**

4.6 PRACTITIONER DEVELOPMENT

This section describes the ETD practitioner development that was developed by the researcher in order to investigate the third subsidiary research question (Figure 4.18) on practitioner development.

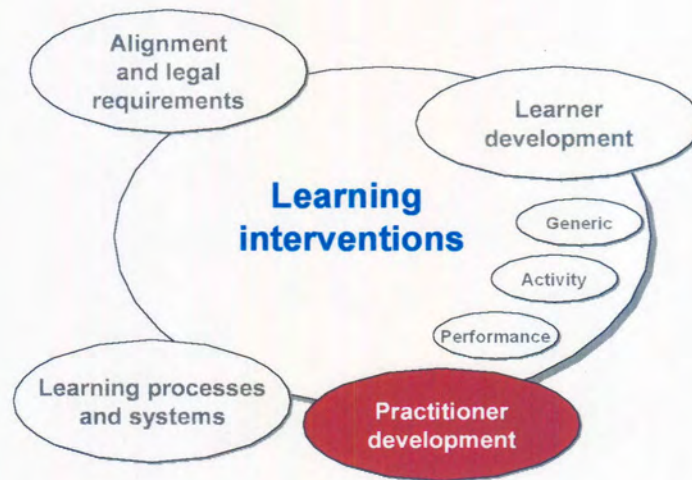


Figure 4.18 – Focus on practitioner development

The focus in relation to practitioner development falls on the following (Figure 4.18 and Figure 4.19):

- Essential development
- Practitioner roles
- Requirements regarding skills and knowledge
- Time utilisation
- Development matrix

Figures 4.18 and 4.19 show  practitioner and distinguish between the learning pathways and skill levels. These competencies and skills are applied and demonstrated in the workplace. The practitioner furthermore acts as the catalyst in the learning process and the necessary integrator of the learning processes.

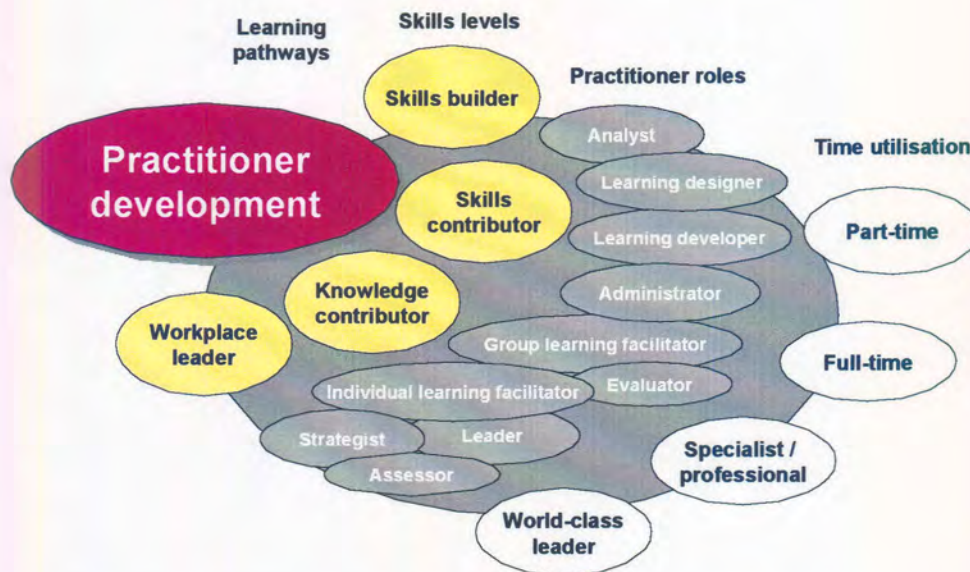


Figure 4.19 – Practitioner development

4.6.1 Essential development of practitioners for the delivery of the learning interventions

The practitioners involved in the training and development of previously disadvantaged employees need specific skills and competencies in order to deliver the required training and development interventions. The practitioners as agents of change integrate the three main elements for triangulation in the training and development process, i.e. the learners, the learning material and the practitioners – the people who implement and maintain the training and development interventions (Figure 4.20).

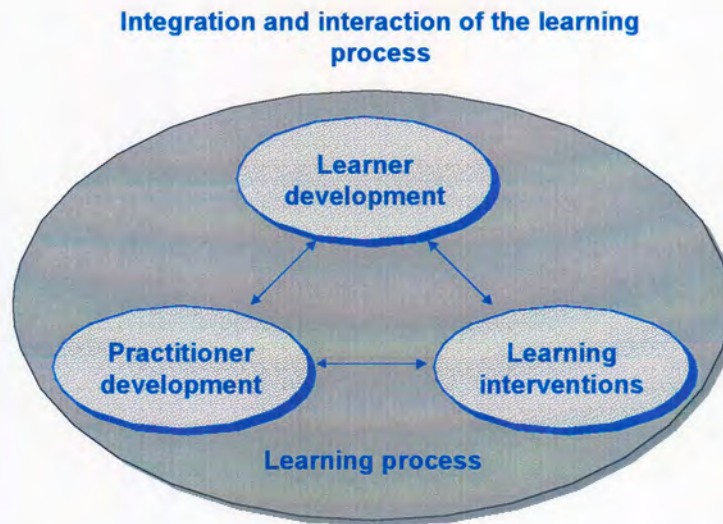


Figure 4.20 – The relationship between the learner, the learning material and the practitioner

4.6.2 Practitioners' roles

In line with national requirements, the roles of practitioners can be classified as follows (National training Board, 1994):

1. Administrator	6. Learning opportunity designer
2. Assessor	7. Learning material developer
3. Evaluator	8. Manager / leader
4. Group learning facilitator	9. Needs analyst
5. Individual learning facilitator	10. Strategist

Table 4.6 – Practitioners' roles (National Training Board, 1994: 138)

Practitioners in practice combine a certain number of the roles shown in Table 4.6 for maximum utilisation and in line with the individual's specific capabilities and potential. The variety of roles allows flexibility for the practitioner to develop competencies as needed. In addition, the practitioner is able to build up his / her own personal development portfolio as required by the line training and development needs.

4.6.3 Practitioners' skill levels

Practitioners' skills and competencies can be grouped according to the following levels to enable them to provide the required and negotiated outputs for the development process (Table 4.7, Figure 4.18):

- Skills builder
- Skills contributor
- Knowledge contributor
- Workplace leader

The advantage of such a categorisation of skill levels is that it provides the line employees who are involved in training and development initiatives with opportunities for HRD development. It in addition provides the employees with HRD practitioner development skills without their having to make career changes.

4.6.3.1 Skills builder

A skills builder is an employee with limited experience and is utilised in a coaching (individual learning facilitator or on-the-job training) capacity and in the practical application of specific skills. This skills builder (coach) trains the learner on specific equipment or in specific practices and procedures. The ideal situation is one-on-one interaction, but with the current demand for skills builders this is not always possible. The skills builder works directly with the learner and so shares the responsibility for the learning outcomes. The skills builder teaches system tasks in the working environment (e.g. electrical systems) and the learner obtains hands-on experience rather than learning the theory in a classroom situation with no interface with the plant and equipment. The learner is evaluated and declared competent in that specific task or outcome. The profile of the skills builder should include at least two of the 10 practitioner roles.

4.6.3.2 Skills contributor

The skills contributor (group learning facilitator or mentor) is responsible for various skills builders (coaches) and acts at a level of greater experience and plant and system knowledge. One of the duties of the skills contributor is to assist and lead the less experienced skills builder. The skills contributor should be in a position to organise and control various skills builders under his / her supervision and maintain the learning environment in the organisation, plant or workplace for a specific discipline (e.g. electrical, mechanical, technicians, etc). The skills contributor has a good understanding of the theoretical and practical application of skills in the working environment. The profile of the skills contributor should include at least four of the 10 practitioner roles.

4.6.3.3 Knowledge contributor

The knowledge contributor should have a more in-depth knowledge of theory, education, processes and systems. This includes the skills and competencies of the skills builder and skills contributor. The knowledge contributor should be able to design, develop, implement and maintain a training system in a working environment using an acceptable educational approach. The design, development and implementation of training and development interventions and systems are the most important outputs of a knowledge contributor, who is not directly involved with the actual training of the learners. However, the knowledge contributor should still have interaction with the learners in a leadership capacity and for purposes of employee well-being and may become involved in the training in a specialist capacity. The skills profile of the knowledge contributor should include at least eight of the 10 practitioner roles.

4.6.3.4 Workplace leader

The workplace leader or world-class leader demonstrates superior educational philosophies and theoretical and practical application of skills in the training and development environment. The world-class leader is able to maintain and manage a cross-discipline training and development environment and to integrate the four focus areas of this research into the development of human capital.

4.6.4 Time utilisation of practitioners in this research project

The involvement of practitioners in this project can be classified as follows:

- **Part-time trainer**

A part-time trainer is utilised in a specialised capacity to provide outputs on an individual basis. These specialised outputs may range from assessment through evaluation, individual and group learning facilitation, learning opportunity design and learning material development to work in a specialist capacity. Skills builders and skills contributors may be utilised as part-time trainers. In this way they enjoy exposure to development as HRD practitioners without having to make a career change.

- **Full-time trainer**

A full-time trainer is a human resources development (HRD) or education, training and development (ETD) practitioner with the necessary educational background and experience to apply his or her skills and knowledge in the development of learning interventions. Skills contributors fall into this category and may be recruited from a line function and developed to become full-time skills contributors.

- **Specialist**

The specialist practitioner contributes specific knowledge, skills and work-related experience to the HRD field. In this application the HRD / ETD specialist functions as a knowledge contributor and subject matter expert in the design and development of learning interventions.

- **World-class leader**

The world-class leader is prominent in workplace leadership, providing philosophical, theoretical and practical applications of skills and competencies as the creator of total learning interventions and systems.

4.6.5 Practitioner skill and knowledge requirements

Table 4.7 indicates the skill level, application and profile of the practitioner involved in the training and development process. The contents of the profile column indicate the components required for and applicable to the utilisation of the practitioner's skills and competencies in the workplace in terms of elements, unit standards, practitioner role, NQF level, work skills and certification relating to the level of application. The difference in the elements at the various levels is an indication of the level of involvement of the practitioner in the training and development process.

An ETD practitioner can thus be defined as an employee who acts as a part-time or full-time lecturer, specialist or world-class leader in performing a combination of ETD/HRD roles as described by the researcher in Chapter 4 and produces outputs as a skills builder, skills contributor, knowledge contributor or workplace leader that will result in learning outcomes that are clearly demonstrated at or after the end of an learning intervention experience.



Application	Level	Profile	Roles
<p>The time application of the practitioner for the different levels (skills builder, skills contributor, knowledge contributor and workplace leader) can be either:</p> <ul style="list-style-type: none"> • Part time • Full-time • Specialist • World-class leader <p>Part-time trainer (Single application of skills in the workplace, e.g. coach, mentor, assessor, module writer, etc)</p> <p>Full-time trainer (As a HRD / ETD practitioner, mentor, coach, assessor, writer)</p> <p>Specialist / professional (As a specialist / professional in a specific field of expertise)</p> <p>World-class leader (Creator, integrator of theory and practice)</p>	<p>1. Skills builder</p> <ul style="list-style-type: none"> • Elements: 20 • Unit standards: XX • Practitioner roles: 2 (two out of seven roles) • NQF level 3 • Work skills level 1: practical application of skills • Certification: certificate 	<ul style="list-style-type: none"> • Administrator* • Assessor • Evaluator • Group learning facilitator • Individual learning facilitator • Learning opportunity designer • Learning material developer 	
	<p>2. Skills contributor</p> <ul style="list-style-type: none"> • Elements: 80 • Unit standards: XX • Practitioner roles: 4 (four out of 10 roles) • NQF level 4 • Work skills level 2: theoretical and practical application of skills • Certification: silver 	<ul style="list-style-type: none"> • Administrator* • Assessor • Evaluator • Group learning facilitator • Individual learning facilitator • Learning opportunity designer • Learning material developer • Manager / leader • Needs analyst • Strategist 	
	<p>3. Knowledge contributor</p> <ul style="list-style-type: none"> • Elements: 80 • Unit standards: XX • Practitioner roles: 8 (eight out of 10 roles) • NQF level 5 • Work skills level 3: design, development and implementation of interventions and systems • Certification: gold 	<ul style="list-style-type: none"> • Administrator* • Assessor • Evaluator • Group learning facilitator • Individual learning facilitator • Learning opportunity designer • Learning material developer • Manager / leader • Needs analyst • Strategist 	
	<p>4. Workplace leadership</p> <ul style="list-style-type: none"> • Elements: 120 • Unit standards: XX • Practitioner roles: 10 (10 out of 10 roles) • NQF level 8 • Work skills level 4: philosophical, theoretical and practical application of skills • Certification: master's, PhD and doctoral degrees 	<ul style="list-style-type: none"> • Administrator* • Assessor • Evaluator • Group learning facilitator • Individual learning facilitator • Learning opportunity designer • Learning material developer • Manager / leader • Needs analyst • Strategist 	

Table 4.7 – Practitioner skill and knowledge requirements

4.6.6 Practitioner development matrix

Table 4.8 indicates the relationship between the roles and skill levels required for the development of the practitioner. The National Qualifications Framework (National Training Board, 1994) identifies the 10 roles applicable to the practitioner’s profile, which form the basis for the development of the individual in terms of this research project.

<i>Practitioner development</i>		<i>Skills levels</i>				
		<i>Skills builder</i>	<i>Skills contributor</i>	<i>Knowledge contributor</i>	<i>Workplace leader</i>	
<i>Individual roles</i>	<i>Roles</i>					
	1. Assessor	F	C	E	C	
	2. Evaluator	F	C	E	C	
	3. Individual learning facilitator	F	C	E	C	
	4. Group learning facilitator	F	C	E	C	
	5. Learning opportunity designer	C	C	E	C	
	6. Learning material developer	C	C	E	C	
	7. Administrator*	F	C	E	C	
	8. Needs analyst	F	C	E	E	
	9. Strategist	F	C	E	E	
10. Manager / leader	F	C	E	E		

F = Fundamental C = Core E = Elective
 * *Practitioner Guide*: Training compulsory for all in the administrator role

Table 4.8 – Practitioner development matrix

The role of administrator is compulsory for all practitioners. However, the content of the administrator role is presented at the fundamental, core and specialised levels in order to emphasise the importance of the role, which includes the development of the practitioner for applications other than the development of previously disadvantaged workers. The administrator role provides essential development relating to administrative duties, data capturing, planning and history-keeping in relation to the learner. The roles of needs analyst, strategist and manager / leader are reserved for specific

developmental purposes in relation to specially identified, appropriate candidates.

4.6.7 Practitioner development

Practitioner development focuses on the development of the practitioner on the path to professionalism. The development of the practitioner relates to the 10 roles of a practitioner as prescribed by the National Qualifications Framework (NQF). This development addresses the skill levels of the practitioner, i.e. the following levels:

- Skills builder
- Skills contributor
- Knowledge contributor
- World-class leader

Each of these skill levels is in turn developed at a *core, fundamental* and *elective* level to allow assessment of the required level of competency in a specific area of application in the workplace.

As previously mentioned in relation to the development of the learner, the development of practitioners must also be in line with the SAQA and NQF requirements (South Africa, 1998b; South Africa, 1995b). This includes development at the fundamental and elective levels in accordance with national policy requirements and at the elective level to accommodate Eskom Human Resources development for practitioners.

4.6.8 Interventions implemented as part of the analysis of practitioner development

The following interventions were analysed, designed, developed and implemented to support practitioner development:

- HRD analysis toolbox
- HRD management toolbox
- HRD guideline 1998
- Student administrator development
- Mentorship development and implementation
- Individual and group learning facilitator development
- Practitioner development

4.6.9 Summary: Practitioner development

This section has described the essential development required to enable an ETD practitioner to integrate the various elements in training related to the learner, learning interventions and the learning environment. It has also emphasised the importance of the practitioner roles and the skill levels required by practitioners. The time allocation and utilisation of the practitioner is crucial when it comes to time commitment and the delivery of negotiated outputs. Practitioner development relates to the development of the practitioner in the various development roles and whether he / she is utilised as a skills builder, skills contributor, knowledge contributor or workplace leader. Various projects on ETD practitioner development are currently in progress and includes the following:

- The aboriginal ETD practitioner development initiated by McLagan (1989)
- The ETD practitioner development work undertaken by the American Society for Training and Development (McLagan & Bedrick, 1983)
- Unedited ETD practitioner roles published by NSB05 in October 1999 for public comments

4.7 LEARNING PROCESS AND SYSTEMS

This section describes the learning processes and systems that were developed by the researcher in order to investigate the fourth subsidiary research question on learning interventions (Figure 4.21).

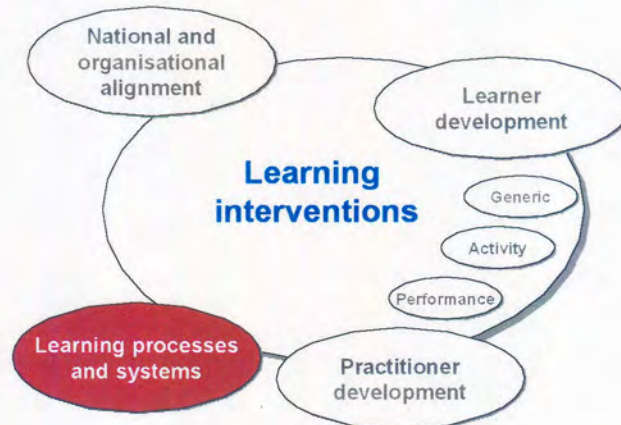


Figure 4.21 – Learning processes and systems

The field of learning processes and systems includes the development of a framework to support the domain of learning interventions, which in turn has four elements (Figure 4.21 and Figure 4.22):

- Delivery of learning interventions
- Transformation
- Project support
- Management and information systems

The processes related to the *delivery of learning interventions* provide the framework for the development of all interventions, learning, materials and infrastructures. The *transformation* process generates the framework and cultural changes required within the process. The *project support* provides the necessary development and implementation supports at a national level. This includes the integration and alignment of the processes with the required

framework and provides for learning interventions to support the process. The activities related to *management and information systems* are the backbone of the process of supporting, capturing and gathering data and information on the relevant systems and processes (Figure 4.22).

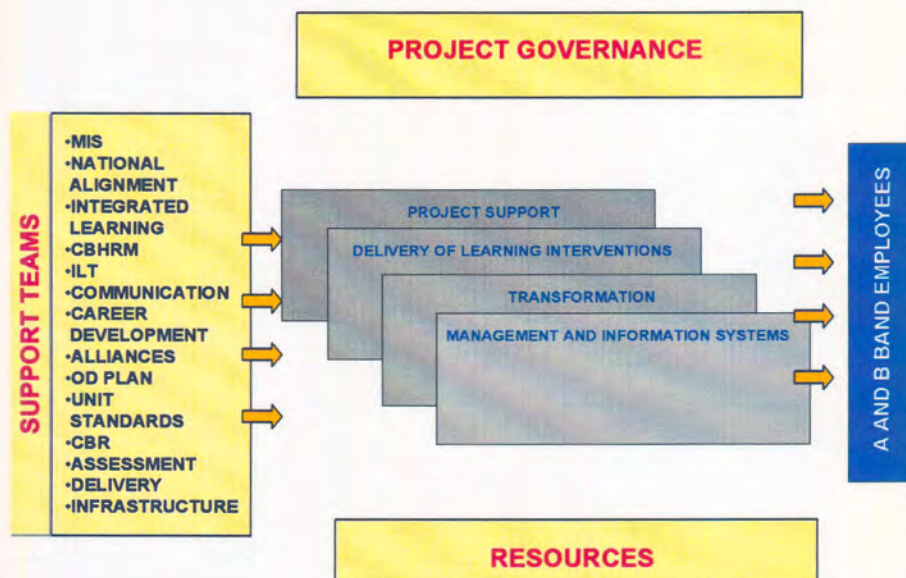


Figure 4.22 – Overview of the learning processes and systems

As indicated in Figure 4.22 the learning processes and systems form an integral part of the development process and accommodate the means to provide the learning processes with the necessary backup and support. This support includes the systems and networks necessary to provide logistical assistance for the advancement process.

4.7.1 Learning process and system integration

The integration of elements of the learning process and system assembles other initiatives currently in progress within the various business units and composes these initiatives in a uniform manner to support the advancement project (Figure 4.23).

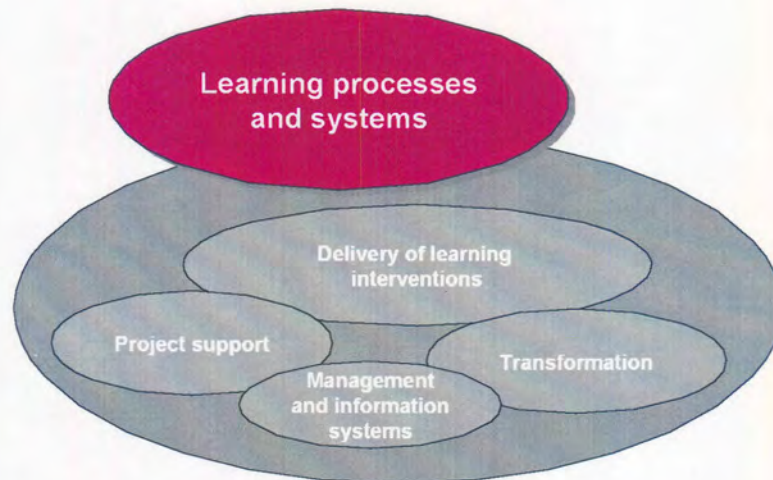


Figure 4.23 – Project processes

Four process teams are envisaged, working to achieve the following:

- The delivery of learning systems provides the framework for the development of all interventions, learning materials and infrastructure.
- The transformation and organisational development process generates the framework for the system-wide application of practices to create and reinforce strategies, structures and processes congruent with and in support of the learning system.
- The project support to the learning systems provides the requirements for integration and environmental alignment.
- The management and information systems activities are the backbone for providing support and capturing and gathering data and information on the relevant systems and processes.

4.7.2 Delivery of learning interventions

The delivery of the learning interventions is based on project management standards, with a project management framework that guides the organisation in implementing the project, and is depicted as follows:

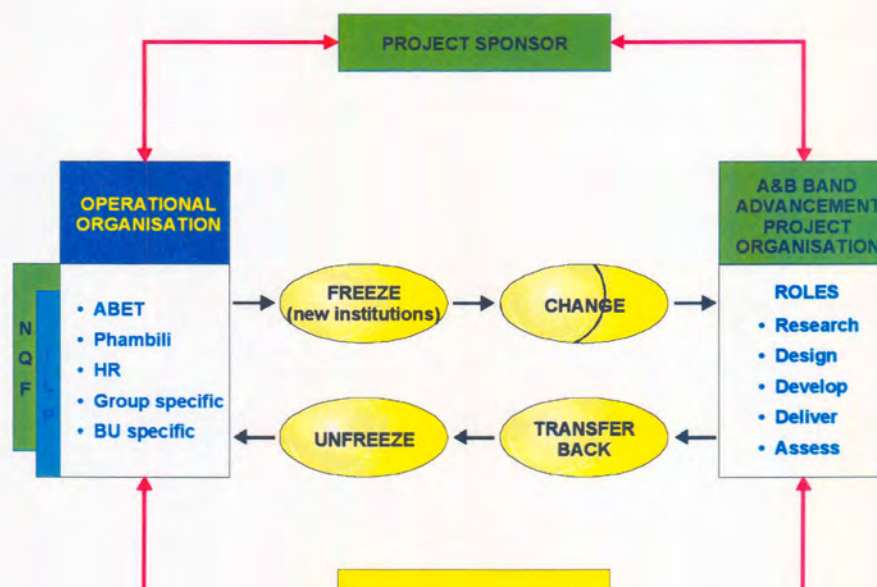


Figure 4.24 – Project management framework (Eskom, 1998a)

During the project organisation phase, current operational initiatives are analysed, evaluated and reviewed to enable the design and development of enhanced, aligned and co-ordinated strategies and processes. These strategies and processes are then transferred back to the operational organisation phase, where they are implemented in conjunction with the process managers of the project. The following principles apply to the delivery of the learning interventions:

- The project focuses on processes, not functional management accountabilities.

- Management of the project functions independently of organisational functional roles.

The delivery of the learning interventions is also based on change management principles (Figure 4.24):

- Freeze
- Change (through research and design)
- Transfer back
- Unfreeze and application

The intention is to enhance, not to stop, current initiatives, and to integrate and support the sub-processes. A strong project-specific focus exists, with the transfer of knowledge and skills as the core element for the development of the practitioners and participants in the project. Project management is supported through appropriate software, with monthly feedback meetings with the project sponsor. The project management team assumes full responsibility for the project and provides the sponsor with final products in accordance with negotiated outcomes in terms of time, quality and resources.

4.7.3 Transformation

The operation of the change drivers that necessitate transformation in the organisation in relation to the utilisation of human resources and the advancement of employees can be illustrated as follows (Figure 4.25):



Figure 4.25 – The transformation process

South Africa is currently in transition. The state of transition is defined as the conditions and activities that are implemented to reach a future desired state. The interdependence between the transitional and transformational states and the future state and new reality can be illustrated as follows (Figure 4.26):

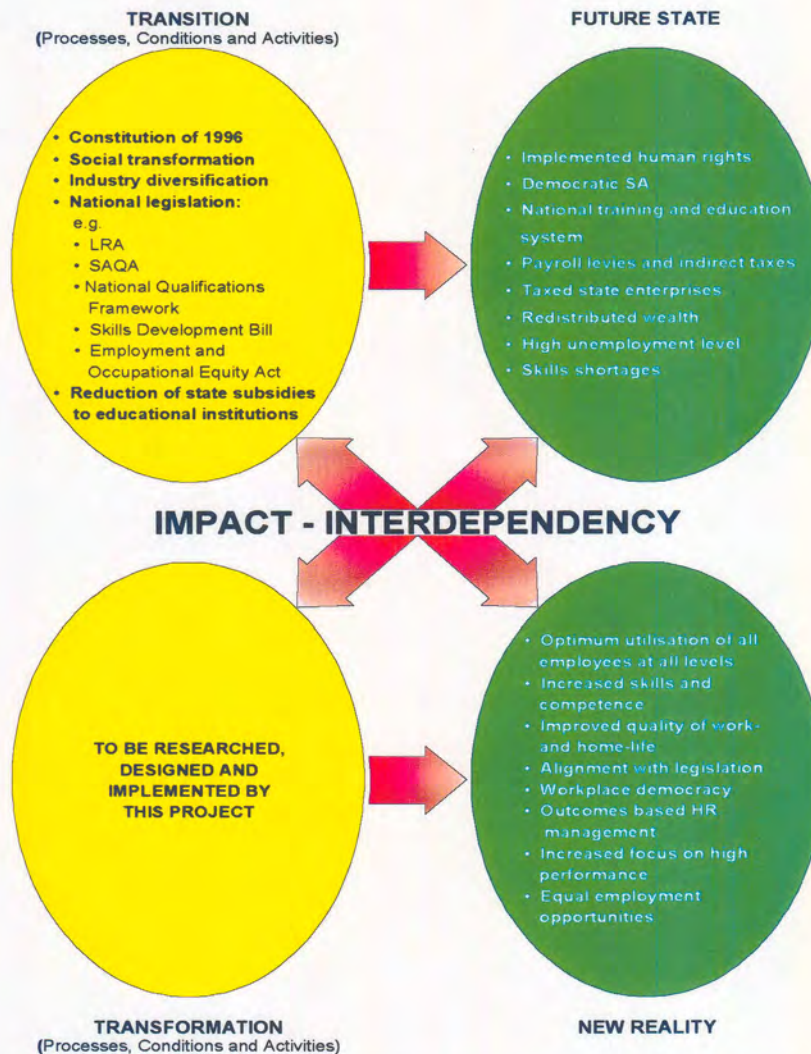


Figure 4.26 – Organisational transition (Eskom, 1998a)

The impact of the transitional processes and activities creates a new reality in organisations as a result of the interdependency of the national state and the organisational reality. The transitional processes and activities, such as the implementation of new legislation and social transformation, necessitate the

organisation revisiting its current realities and transforming in accordance with the national transition.

The process of transformation within the organisation requires it to integrate, reposition and enhance the advancement strategies promoted by the implementation of change management interventions. The facilitation of the change management process can be illustrated as follows (Figure 4.27) (Eskom, 1998a):

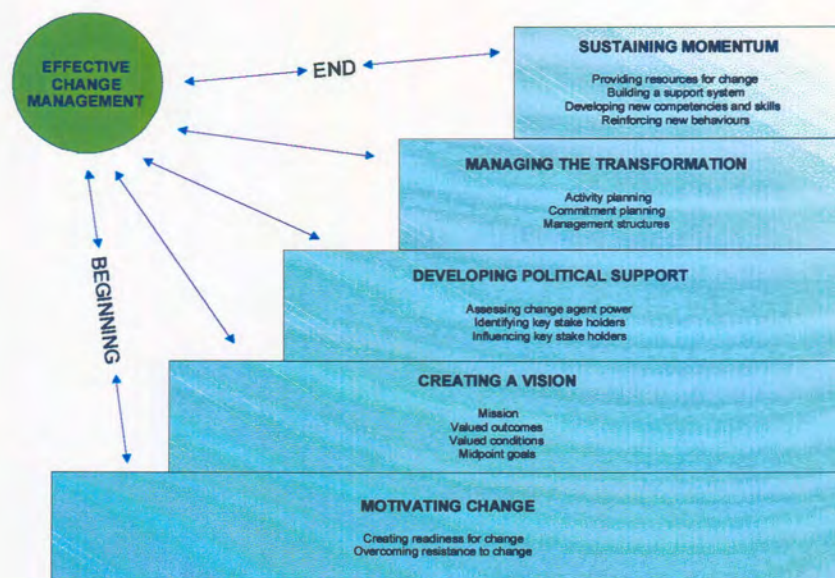


Figure 4.27 – Activities for effective change management (Eskom, 1998a)

4.7.3.1 Motivating change

Motivating change includes creating a readiness for change among the employees of the organisation and helping them to overcome resistance to change. This involves creating an environment where employees accept the need for change and commit physical and psychological energy to it. Motivation is a critical issue in starting change, as employees seek to preserve the status quo and are willing to change only when there are compelling reasons to do so. An appropriate organisational development

intervention to use is an organisation-wide conference meeting with all stakeholders in the current learning system.

4.7.3.2 Creating a vision

Creating a vision for the desired future state and implementation of the learning systems provides the scope for future training and development. The vision also provides a direction for change and serves as a benchmark for assessing progress.

4.7.3.3 Developing political support

The development of political support for change entails the assessment of the power of influential stakeholders and the involvement of powerful individuals.

4.7.3.4 Managing the transformation

The management of the transformation process from the current state to the desired future state involves creating a plan for managing the change activities as well as planning management structures for operating the organisation during the transformation period.

4.7.3.5 Sustaining momentum

The momentum for change must be sustained to the point of completion of the project. One of the most important activities in this phase is the provision of resources for change and the development of new competencies and skills.

4.7.4 Project support

The deliverables of the advancement project are supported by the 17 sub-projects in the list below aimed at enhancing the development of the learner.

Sub-project	Final deliverable/outcome
1. Organisational development plan	<ul style="list-style-type: none"> • Change management plan in support of conceptual framework
2. Outcomes-based approach to people management	<ul style="list-style-type: none"> • Competency-based human resource management (CBHRM) plan together with implementation requirements and organisational model
3. Career and learning pathways	<ul style="list-style-type: none"> • Directive, together with processes
4. Competency-based remuneration (CBR)	<ul style="list-style-type: none"> • Competency-based remuneration (CBR) directive
5. Competence profiling	<ul style="list-style-type: none"> • Directive and corporate guidelines
6. Competency-based assessment	<ul style="list-style-type: none"> • Directives, procedures and guidelines
7. HRD / ETD practitioner development	<ul style="list-style-type: none"> • HRD practitioner development framework aligned with HR roles
8. Integrated learning systems	<ul style="list-style-type: none"> • Learning interventions and resources plan together with implementation requirements
9. Unit standards and accreditation	<ul style="list-style-type: none"> • Directive for NQF implementation
10. Delivery infrastructure	<ul style="list-style-type: none"> • Integration model
11. National alignment	<ul style="list-style-type: none"> • Directives aligning all organisational processes
12. Application of learning technology	<ul style="list-style-type: none"> • Support plan together with implementation requirements covering recommendations for all learning interventions
13. Communication and marketing	<ul style="list-style-type: none"> • Communication and marketing plan together with implementation requirements and critical success factors
14. Alliances and partnerships	<ul style="list-style-type: none"> • Document containing potential providers, description of services and recommendations regarding possible associations
15. Quality assurance	<ul style="list-style-type: none"> • Audit reports
16. Management and information systems	<ul style="list-style-type: none"> • Directive for HR targeted management systems together with processes including management and information systems (MIS).
17. Train the trainer	<ul style="list-style-type: none"> • Training, development and repositioning of ETD / HRD practitioner

Table 4.9 – Project breakdown

4.7.5 Management and information systems

Information technology plays an essential enabling role in the implementation of the advancement project as discussed. The overall abilities and benefits of the management and information systems are as follows:

- Accurate record-keeping of learning interventions
- Record-keeping of training interventions completed by learners
- Record-keeping of available interventions
- Establishment of a course catalogue and menus for course selection
- Capturing of financial cost
- Record-keeping in relation to accredited service-providers and products
- Critical support source for driving and supporting human performance

As part of the management and information system, the registrar creates the following process systems and databases:

- Career paths
- Job and competency profiles
- Learning resource guide
- Cyber databank of learning interventions
- NQF accreditation
- Personal development plans

In addition, the management information systems utilise a register that provides the following detailed information about the learning interventions:

- Information on the learner
- Glossary of terms

- Policies and directives
- Learning information support
- Learning intervention directories
- Costing facility

The *learning processes and systems* provide the support, framework and infrastructure to develop, implement and evaluate the *learning interventions*. These *learning processes and systems* are articulated into the following sub-systems and sub-processes:

Delivery of learning interventions

- The processes related to the *delivery of learning interventions* provide the framework for the analysis, design, development and implementation of learning interventions on a practical and physical basis. This is used to analyse, align and integrate learning interventions currently utilised in the working and learning environment.

Transformation

- The *transformation process* develops and implements the necessary framework for an appropriate organisational culture and linkages to other systems and processes within the organisation (e.g. pay links, recognition for prior learning, assessment, etc.).

Project support

The processes related to *project support* provide the framework and support for the following:

- National alignment

- Communication and marketing
- Alliances, partnerships and commercialisation
- Application of learning technologies

Management and information systems

- The *management and information systems* are the most important link between the sub-processes and sub-systems. They provide the necessary support and framework to accommodate the capturing of all data, the registration of interventions and the training and development intervention events taking place within the research project.

4.7.6 Interventions implemented as part of the analysis of the learning processes and systems

The following interventions were analysed, designed, developed and implemented to support the development of learning processes and systems:

- External ABET survey
- Eskom ABET audit
- Evaluation of ABET service-providers
- Experiential process development
- Transmission School of Technology
- Induction programme development
- Eskom Transmission Group HRD Web-site
- Eskom Transmission Group profile

4.7.7 Summary: Development of learning processes and systems

The essence of the learning processes and systems lies with the four focus areas identified:

- Delivery of learning interventions
- Transformation
- Project support
- Management and information systems

The demarcation of the focus areas led to the integration of 16 independent and individual initiatives and projects within the organisation. The learning processes and systems provide the basis for a generic framework and approach to practitioners involved in the project by applying the “freeze, change, transfer back and unfreeze” methodology. The change drivers establish the climate and culture for transformation in the organisation. Predefined sub-project deliverables provide the participants with clear negotiated objectives supported by the management and information systems.

4.8 LEARNING INTERVENTIONS

This section describes the learning interventions that were developed by the researcher in order to investigate the main research question (Figure 4.28) on learning interventions.

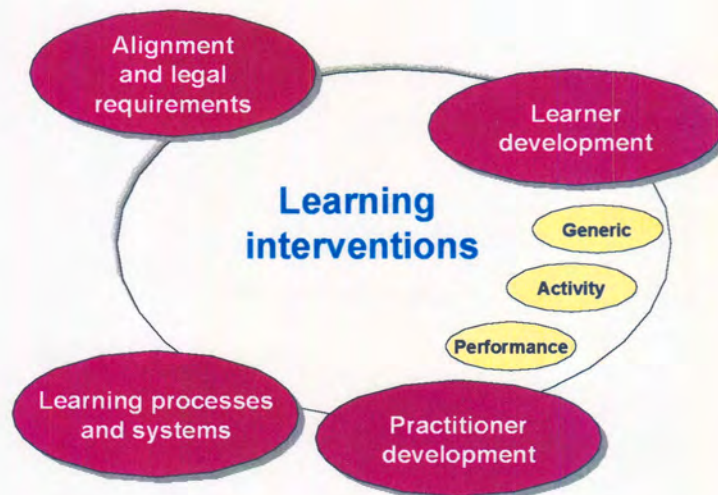


Figure 4.28 – Learning interventions and focus for this research

4.8.1 Philosophy for education, training and development

A philosophy for education, training and development is concerned with examining the practice and such a philosophy takes as its purpose the examination of the form which human reason assumes in the practice. In addition, a philosophy of education examines concepts of education, teaching and learning and the person who practices it. McClellan (1976) examines the concept of education and argues that:

- it is possible to differentiate the concept from that of a value neutral to a social scientific concept;

- we should be critical of the actual educational arrangements in the educational environment of the economically developed nations;
- the essence of a concept of education has become a penetration of the contemporary social consciousness;
- it is bound to deliberate efforts to help people become better persons in ways which actively engage cognitive processes and avoid indoctrination as sophistry.

Learning interventions serve as the integrator of and catalyst for the learning processes and systems, as discussed below, and include elements related to national and organisational alignment, learner development, practitioner development and learning processes and systems.

4.8.2 Blueprint for the training and development process

A blueprint for the development of learning interventions indicates the roles and places of the various elements in the integrated training and development process, including the relevant alliances that influence the training and development outcomes. Previously disadvantaged employees constitute the input into the process, as unskilled workers, and exit the process as competent and skilled workers, as shown in Figure 4.29. The macro advancement model comprises a learning process with the following components:

- Input
- Micro model and process
- Output
- Primary and secondary control and external influences

• **Micro model**

The training and development (micro model) process provides the system with the required training plans and curricula. The training programmes that have been implemented are assessed against the learners' performance and benchmarked against the unit standards developed for the specific learning interventions.

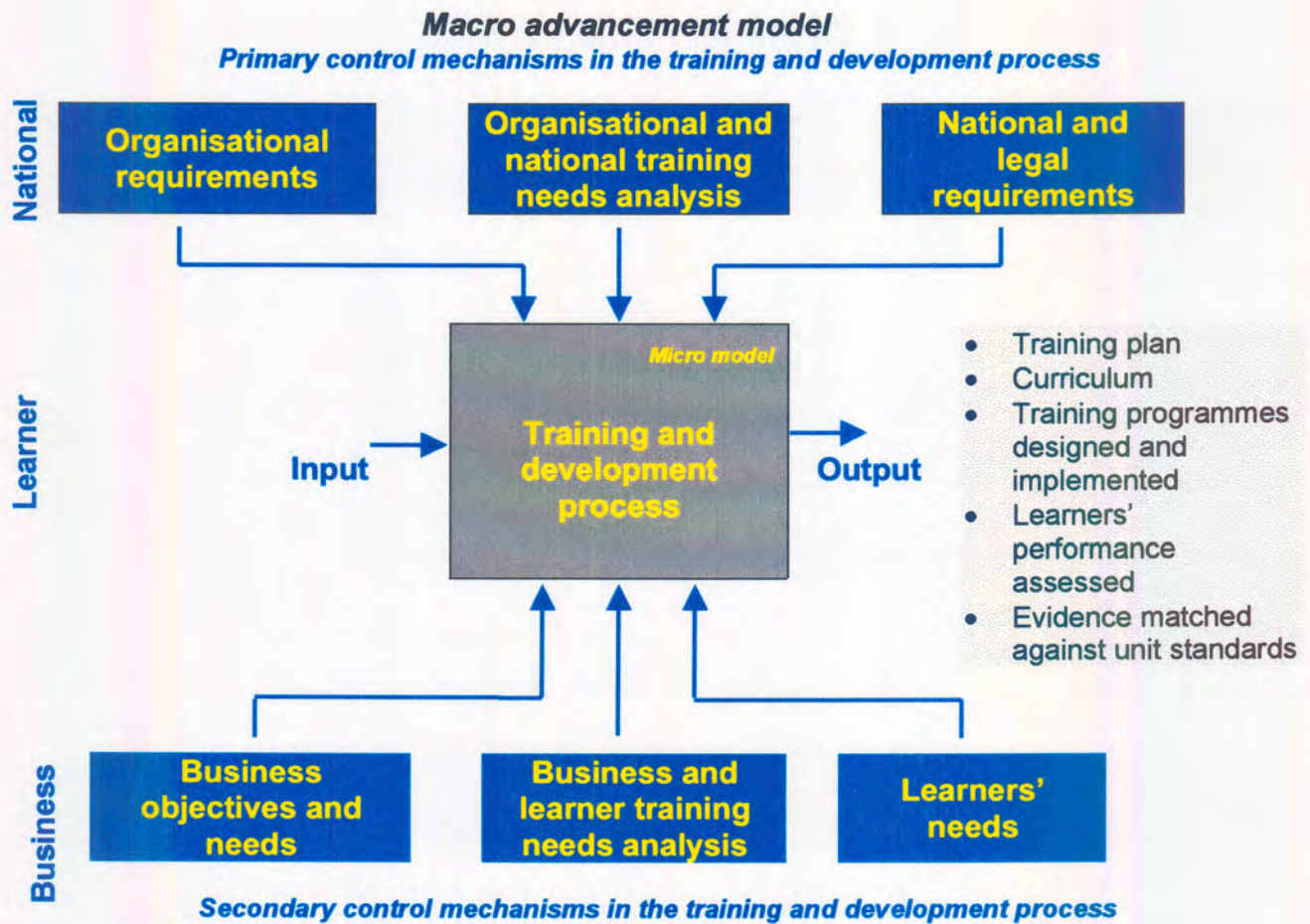


Figure 4.29 – Training and development blueprint

• **Primary and secondary mechanisms**

The primary control mechanisms (employer business objectives, training needs analysis, and national requirements and legislation) influence the learning interventions required by the employer, who is

responsible for the training and development of the employees. These primary control mechanisms include national alignment initiatives, and most of these legal requirements are not negotiable for the employer and represent the minimum requirements.

On the other hand, the secondary control mechanisms (learners' needs, unit standards and organisational transformation requirements) serve as control mechanisms to align the process with national standards and organisational requirements. These secondary control mechanisms provide the employer with more flexibility for aligning the organisational objectives and the employees' needs with one another. These secondary control mechanisms are highly negotiable as long as the employer and employee are accommodating the organisational business objectives and national requirements.

The primary and secondary control mechanisms support the learner as an individual and play a critical role in the learning outcomes (Figure 4.29). The input into the learning process also accommodates the integration of previous training and development interventions, which are used to support the learning environment.

4.8.3 Delivery of training and development interventions

The blueprint for the training and development processes actualised the micro model in the following four phases (Figure 4.30):

- Research and design
- Development
- Delivery
- Assessment

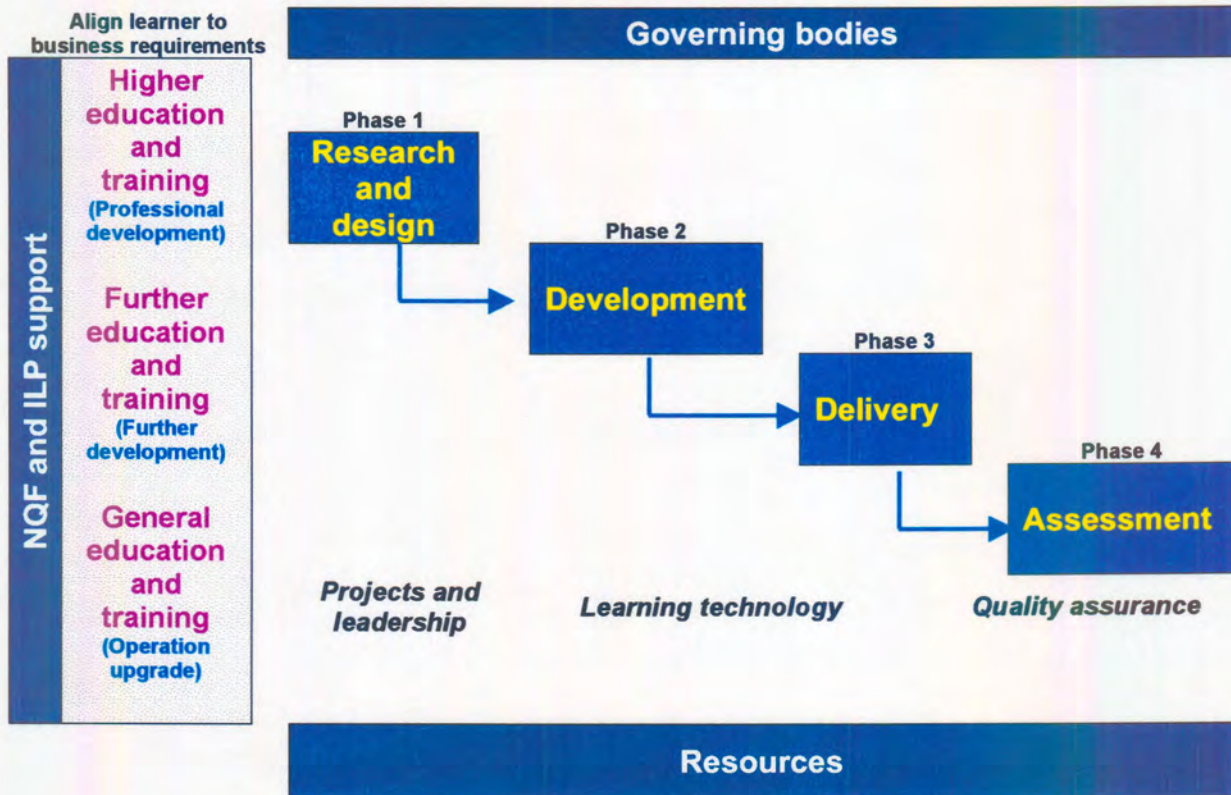


Figure 4.30 – Micro advancement model

- **Research and design**

In the research and design phase the practitioner focuses on the requirements and business objectives of the employer, based on a training needs analysis, to align the learning process with the business requirements.

- **Development**

Based on the above-mentioned requirements, the practitioner develops the specified and required learning interventions to meet the particular business needs of the employer.

- **Delivery**

In the delivery phase the interventions are developed to provide the training and development of the learners to achieve predetermined outcomes.

- **Assessment**

The outcomes-based assessment is done using various modes, including theoretical, practical and on-the-job assessment and evaluation and a demonstration of the required competence.

- **Resources**

To support the four phases, the governing bodies and the relevant resources provide the required manpower and financial support for the training development process.

- **Support**

The National Qualifications Framework (NQF) and Integrated Learning Programme (ILP) accommodate the general, further and higher education and training interventions at a national level to support the alignment of this process.

Through the *development and provision of learning interventions* the delivery of training interventions is brought into line with the National Qualifications Framework (NQF) requirements supported by the human resources development interventions specific to an organisation.

- **Governance**

The governance and resources within the organisation provide the necessary mechanisms for delivery of the interventions in order to ensure delivery and the quality of the products.

- **Underlying principles**

The micro advancement model and process are driven by project management support, learning technology support and quality assurance to provide the necessary frameworks, guidelines and support to monitor the quality of the products delivered and learning outcomes.

4.8.4 The purpose of the learning environment

The purpose of the learning environment is to develop training and development interventions that are aligned with the national requirements (South Africa, 1997c) and that provide the learner with focused training, including recognition for skills gained and applied in the workplace. The framework for the learning environment is supplemented by unit standards and credits achieved in the learning process. The assessors and internal verifiers (Figure 4.31) assess the credits achieved in the learning process against the unit standards.

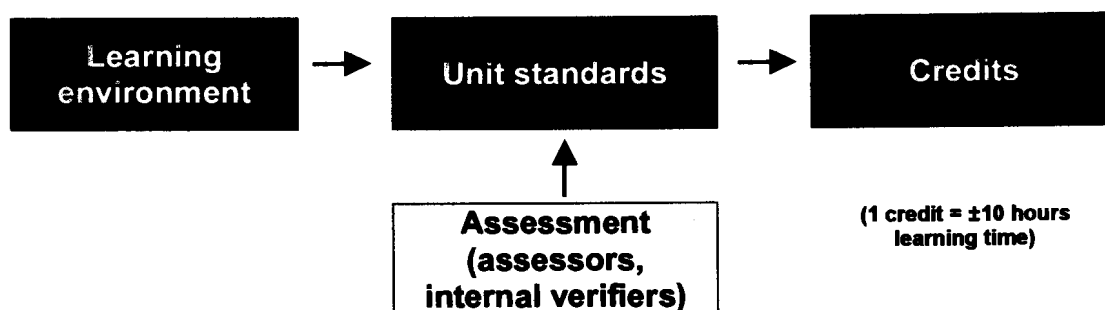


Figure 4.31 – Purpose of the learning environment

The purpose of the learning environment as indicated in Figure 4.31 is eventually to lead to the holistic development of the learner. The credits are obtained by demonstrating competencies and skills gained in the learning process and form the basis for progress to the next development level to fulfil

the required identified outcomes per role and then per job or work profile (Figure 4.31).

4.8.5 Foundation of the integrated learning process

The integrated learning process is based on a holistic approach to the development of previously disadvantaged employees. In training and development, the development is structured in such a way that the learner develops and builds up the skills required (Figure 4.32). As shown in Figure 4.31, the training and development promotes the fundamental, core and elective levels of competencies and outcomes required by a specific job and the work involved. The job or work profile of the learner includes a range of outcomes, unit standards and roles.

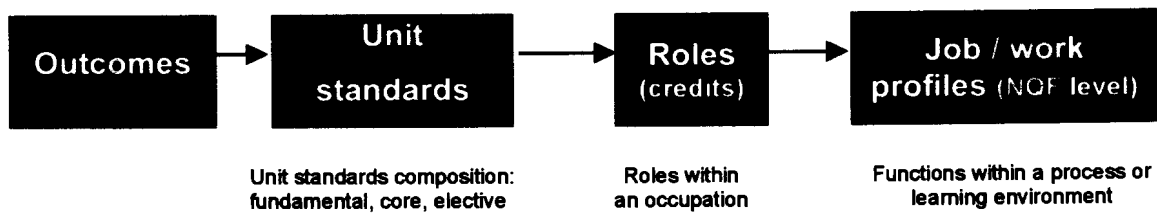


Figure 4.32 – Foundations of the learning process

As shown in Figure 4.32, the unit standards comprise competencies varying from:

- fundamental (basic skills requirements); and
- core (generic or intermediate skills requirements); to
- elective (advanced and specialised skill requirements).

The roles (or credits acquired) are applicable to a specific occupation, which functions within a specific working environment or learning process.

4.8.6 Fundamentals of the learning process

The fundamental components of the learning environment and process involve the development of the learner in such a way that he or she is able to select a range of outcomes from a competency menu to cater for specific work requirements.

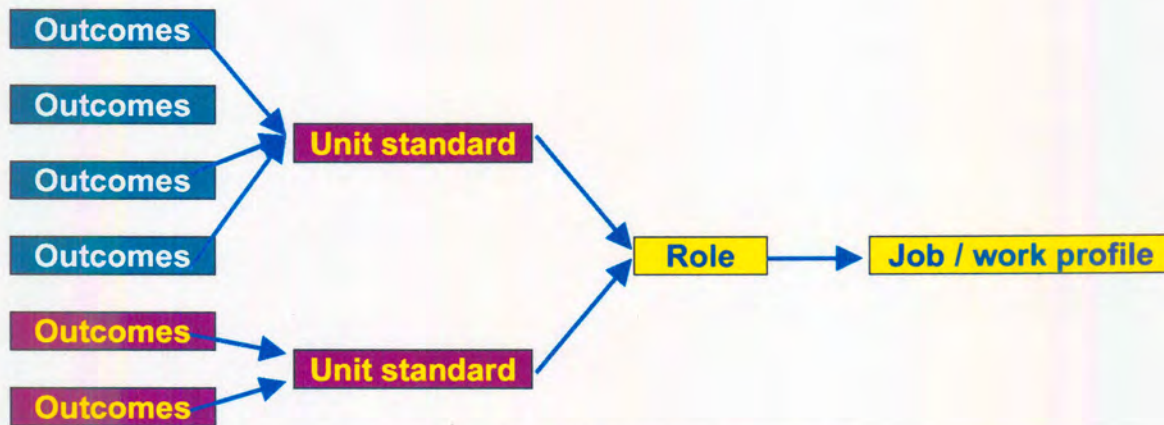


Figure 4.33 – Fundamentals of the learning process

As shown in Figure 4.33, the learner selects and acquires the necessary skills from a range of outcomes, which result in credits that form a unit standard. These unit standards result in the various roles the learner performs in the work environment. The work profile consists of roles applicable to a specific job or task, required as outputs of the learner's daily tasks.

4.8.7 Impact of the training and development process

The impact of the training and development process is evident in the demonstration of skills and competencies in the workplace and the alignment with the NQF. As shown in Figures 4.34 and 4.35, the development of the learner's skills occurs in the following phases:

- Generic
- Activity
- Performance

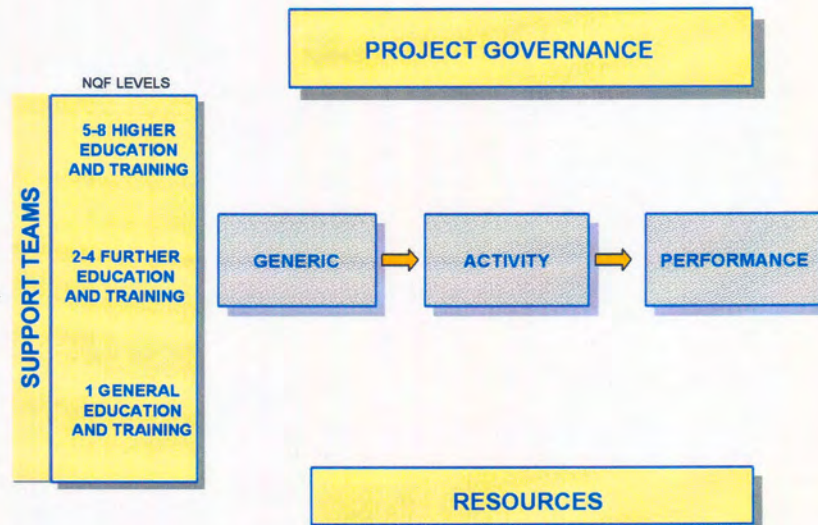


Figure 4.34 – Impact of the training and development phases

4.8.8 The focus of the training and development process

The focus of the training and development process influences the three phases shown above, i.e. the generic, activity and performance phases.



Figure 4.35 – Focus of the training and development phases

- **Generic training phase focus**

With generic training and development the learner complies with the requirements specified by the legal bodies with regard to formalised and experiential training and development (Figure 4.34). The learner obtains a formal qualification on completion of formal training and fulfilment of the requirements specified by the technical colleges and the Manpower Act for the training of apprentices. Technician training and development fulfils the requirements specified by the technikons for the training of a technician and those specified by the universities for the training and development of an engineer.

- **Activity training phase focus**

As soon as the learner has qualified in a specified discipline, the focus of the training and development shifts to the activity phase (Figure 4.34). The learner is exposed to the work environment as a qualified person, but not as a competent worker. This implies that the learner can apply the necessary skills under the direct and close supervision of a coach or mentor. If and when the learner has obtained the necessary skills, attitude and knowledge in the workplace by means of on-the-job training and exposure, the focus shifts to performance training.

- **Performance training phase focus**

Performance training focuses on the development of the learner to render an improved and quality service to the employer (Figure 4.34). As soon as the learner is in a position to accomplish performance activities, the outcomes have an impact on the business, leading to a reduction in costs and an improvement in process results.

4.8.9 Interventions implemented as part of the analysis relating to learning interventions

The following interventions were analysed, designed, developed and implemented to support the development of learning interventions:

- HRD transformation
- A and B band project report
- Practitioner development
- Implementation of the *Skills Development Act*

4.8.10 Summary: Learning interventions

The learning interventions developed provide a focused view of the integration of training and development interventions from a macro to micro level.

- The design focused on a macro advancement model with a related educational philosophy and the means to integrate the diverse national interventions into the organisation.
- The development phases included the delivery of the learning interventions through the application of design, development, delivery and assessment processes.
- The utilisation of the learning environment was based on unit standards and credits, with appropriate assessment measures.
- The foundations on which the learning process is based and the substructure on which the fundamentals of the learning interventions are established were illustrated.
- The impact of the learning interventions on the employee in terms of generic, activity and performance training were highlighted.

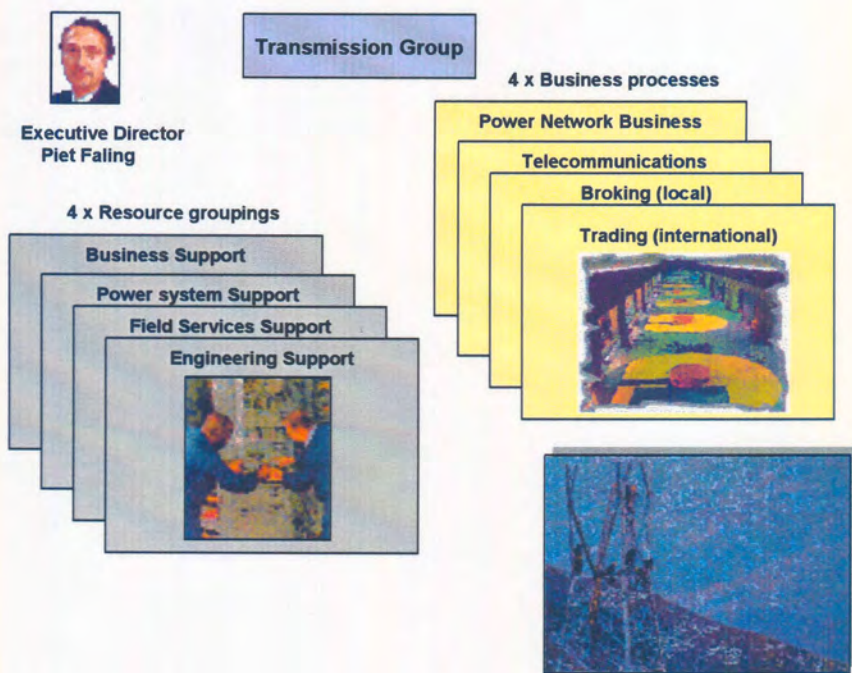
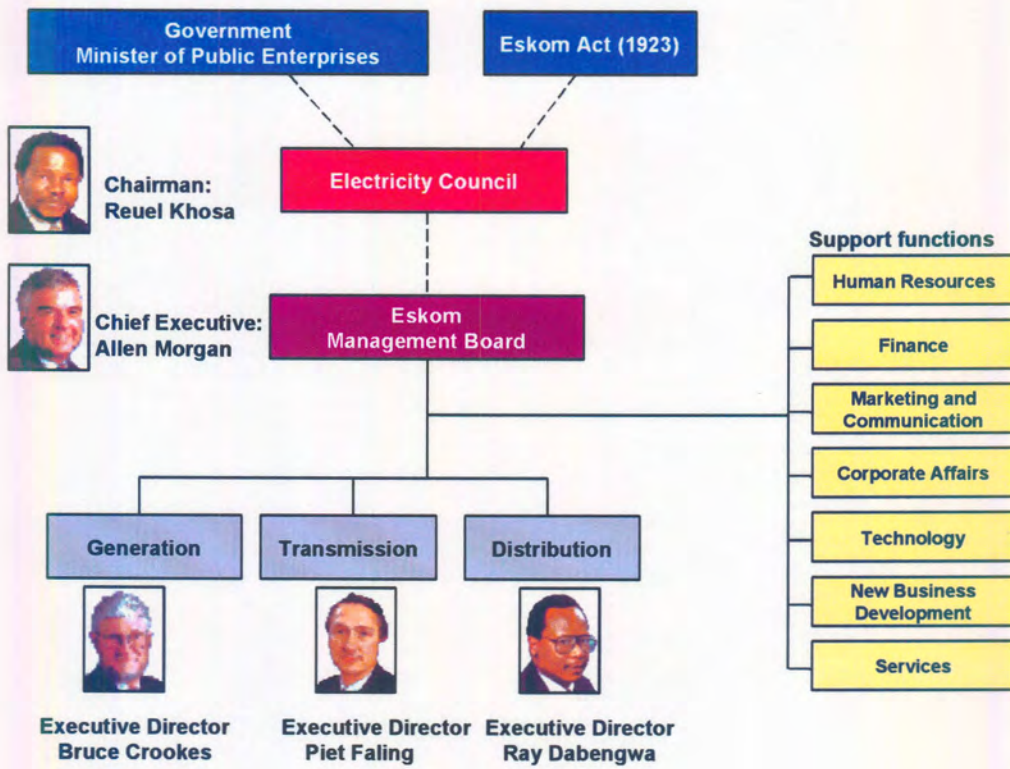


4.9 SUMMARY

This chapter has described the five-year action research project undertaken by the researcher and the diverse teams assisting in the process to investigate, design, develop, implement and evaluate a macro learning process. This research was supported by different analyses conducted during the different phases of the project evident in the data collection plan (Table 5.3). The way in which each of the focus areas interfaces with and influences the others was revealed and the development of the micro processes and the integration of many individual sub-projects into an assemblage were traced. In addition, this chapter highlights the consequences of national influences on each of the interventions developed and the building of competencies from outcomes right through to unit standards that form part of a work profile. The assessment of and recognition for prior learning on the part of the employee are supported by personal development plans and programmes, which also have benefits in social development and integration.

This chapter highlights the variety of roles, responsibilities and accountabilities of the researcher and individuals participating in the process. For example, the researcher was not only responsible for the sub-process of *project support*, but also for the management and integration of the whole learning process and systems (Chapter 4.7.1; Appendix B; Appendix C). An open door policy and participative management style were used to obtain maximum participation and support during the various processes.

The research findings elicited from this project are discussed in the next chapter.



Experiential learning process (map)

