# GENERIC LEARNING OUTCOMES IN A TECHNIKON DIPLOMA PROGRAMME: A CRITICAL ANALYSIS

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# **DECLARATION**

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

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# SUMMARY

In 1997, the South African Qualifications Authority (SAQA) published its guidelines 'to provide for the development and implementation of a National Qualifications Framework (NQF)' (Government Gazette 1997:35). This framework was to pave the way for compelling transformation in the education sector. One of the key features of the framework would be a directive that a series of competencies, or generic skills, that SAQA termed its 'critical cross-field outcomes' would have to be incorporated into the design of all programmes of learning. The publication of the guidelines sparked considerable debate; a debate that, in the five years since 1997, does not appear to have been resolved. As higher education institutions prepare for the 2003 submission of programmes to SAQA for registration, the importance of swift and meaningful intervention is self-evident.

This report gives an account of a study undertaken to allow for the critical analysis of generic learning outcomes, or specifically SAQA's critical outcomes, as they present themselves in a technikon diploma programme. While the initial impetus in terms of the skills debate may appear to have arisen as a result of national imperatives, the overview of the literature pointed to international precedents, particularly when the issue of generic skills was contextualised against the background of the changing higher education landscape.

Thus empirical research was conducted at the Cape Technikon using the National Diploma in Human Resources Management, its academic staff and its second-year student group, as its focus. The qualitative data, generated via multiple techniques including document analysis, interviewing, and a survey, provided a wealth of information and in-depth insight into the perceptions and attitudes of the respondents. The researcher endeavoured to maintain a practical focus throughout the study and sought to interpret and critique existing practice against best practice as described in the literature.

The findings highlighted numerous issues relating to the integration of generic learning outcomes into programmes of learning. Key among these were the

apparent lack of clarity and guidance among students and staff about the meaning of, and envisaged role for, the generic learning or critical outcomes; the fact that many in the technikon sector are already employing those teaching and learning strategies that are deemed appropriate when following an outcomes-based approach; that the changing student profile has had a direct impact on what happens in the classroom; and that assessment systems and practices appear to be the main barriers to the effective development of generic skills.

In response, this study recommends that a structured, holistic, process approach be implemented at those institutions that are serious about integrating SAQA's critical outcomes into their programmes of learning. While such an approach would require institutional support and guidance, as well as an overall commitment to staff development, it is the contention of the researcher that the technikon sector, by virtue of its career-oriented focus and the design of its programmes, is ideally positioned to embrace the SAQA challenge successfully.

## **OPSOMMING**

Die Suid-Afrikaanse Kwalifikasieowerheid (SAKO) het in 1997 riglyne gepubliseer wat voorsiening maak vir die ontwikkeling en implementering van 'n Nasionale Kwalifikasieraamwerk (NKR). Hierdie raamwerk sou die weg baan vir ingrypende veranderinge in die onderwys. Een van die sleuteleienskappe van hierdie raamwerk was die opdrag dat 'n reeks bevoegdhede, of generiese vaardighede, wat deur SAKO as sy 'kritiese uitkomstes' beskryf is, in die opstel van alle leerprogramme ingesluit moes word. Die publikasie van die riglyne het 'n aansienlike debat ontketen; 'n debat wat in die vyf jaar sedert 1997 oënskynlik nog nie tot 'n einde gekom het nie. Aangesien hoëronderwysinstellings hul voorleggings vir 2003 aan SAKO vir registrasie nou reeds begin voorberei, is die noodsaaklikheid van 'n vinnige en betekenisvolle besluit hieroor voor die hand liggend.

Hierdie verslag gee 'n uiteensetting van navorsing wat gedoen is om 'n kritiese analise van generiese leeruitkomstes, of spesifiek die kritiese uitkomstes van SAKO, soos toegepas in die diplomaprogram van 'n tegnikon, te beskryf. Alhoewel dit aanvanklik mag gelyk het asof die debat oor vaardighede sy ontstaan aan 'n nasionale opdrag te danke gehad het, het 'n oorsig van die literatuur daarop gedui dat internasionale presedente ook daartoe aanleiding gegee het, veral in gevalle waar vrae betreffende die generiese leeruitkomstes teen die agtergrond van 'n veranderende hoëronderwyslandskap beskou is.

Empiriese navorsing is aan die Kaapse Tegnikon onderneem met die Nasionale Diploma in Menslike Hulpbronnebestuur, sy akademiese personeel en tweedejaarstudente, as fokuspunt. Kwalitatiewe data is deur die gebruik van verskeie tegnieke gegenereer wat dokumentêre analise, onderhoudvoering en 'n vraelysopname insluit. Hierdie data het 'n bron van inligting oor, en insae, tot, die persepsies en houdings van die respondente verskaf. Die navorser het deurgaans gepoog om 'n praktiese fokus tydens die studie te behou en om die huidige praktyk te interpreteer en te beoordeel teenoor dit wat as suksesvol in die literatuur bestempel is.

Die bevindinge het verskeie aspekte ten opsigte van die insluiting van generiese leeruitkomstes binne leerprogramme na vore gebring. Van die belangrikste aspekte is die klaarblyklike gebrek aan duidelikheid en leiding, onder sowel studente as akademiese personeel, oor die betekenis van, en beoogde rol vir die kritiese of generiese leeruitkomstes; die feit dat vele akademici in die tegnikonsektor reeds gebruik maak van die onderrig- en leerstrategieë wat as toepaslik vir uitkomsgebaseerde onderrig beskou word; dat die veranderende studenteprofiel 'n direkte impak gehad het op dit wat in die klaskamer gebeur; en dat assesseringspraktyke en –metodes tans die grootste remskoen in die effektiewe ontwikkeling van generiese vaardighede blyk te wees.

In antwoord hierop beveel hierdie studie die implementering van 'n gestruktureerde, holistiese, prosesbenadering by die instellings aan wat erns maak met die insluiting van SAKO se kritiese uitkomstes in hul leerprogramme. Alhoewel so 'n benadering ondersteuning en leiding van die instellings, asook 'n algemene verbintenis tot personeelontwikkeling, sal vereis, is dit die navorser se oortuiging dat die tegnikonsektor, as gevolg van sy loopbaangerigte fokus en die inhoud van sy programme, ideaal geposisioneer is om die SAKO-uitdaging suksesvol die hoof te bied.

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# CHAPTER ONE

# Orientation to the study

The critical value of higher education to society lies in its ability to provide graduates with thinking and practical abilities that can both enrich society and enhance its development considerably.

(Council on Higher Education 2000:30)

#### 1.1 INTRODUCTION

In 1997, the South African Qualifications Authority (SAQA) published its guidelines 'to provide for the development and implementation of a National Qualifications Framework (NQF)' (Government Gazette 1997:35). This framework was to pave the way for compelling transformation in the education sector as a response to the 'virtually universal discontent with the nature and quality of education and training in South Africa' at the time (SAQA 1997:2). SAQA's vision was one of 'enhancing the quality of education and training. . . thereby contributing to the full personal development of each learner and the social and economic development of the nation at large' (SAQA 1997:4). The NQF was to provide the vehicle that would, it was hoped, realise these objectives.

As SAQA set about designing the NQF, it provided guidelines for key features that would be established within the framework for all sectors in education, including Higher Education. Among these key features were requirements for compiling study programmes in an OBE (outcomes based education) genre. One of the requirements stipulated that a series of competencies that SAQA termed its 'critical cross-field education and training outcomes' would have to be incorporated in the design. These, SAQA believed, would be vital to 'the development of the capacity for lifelong learning' (SAQA 1997:4). SAQA requires that all qualifications submitted for registration with them, should address the critical outcomes by ensuring that some or all of them are embedded within the different unit standards making up a particular qualification (Government Gazette 1997:46).

Since the first publication of the requirements for compiling a programme for registration within the NQF, there has been much debate about these critical cross-field education and training outcomes (short title: critical outcomes), particularly in higher education.

Questions as to whether the competencies or skills listed by SAQA are indeed the most critical ones, and whether they should be implicit or explicit in the make-up of the programme soon arose. Other issues centre around the assessment of the outcomes, questioning how valid assessment might be conducted, if indeed at all. The debate has been taken up at many higher education institutions, as academic staff have been tasked with redesigning their course outlines or study guides in keeping with NQF and outcomes-based education requirements. To date it remains unresolved. During the past three years that have seen the interim submission of qualifications and unit standards for registration with SAQA, many have grappled with the whole issue of redesigning curricula and transforming approaches to teaching and learning in an attempt to adapt to the requirements of the new dispensation. The implications for both the academic and the student are immense with many highlighting the initial lack of direction and clear guidelines, all of which have added to what has been seen to be an onerous task.

The status quo has prompted many questions surrounding the notion of incorporating generic learning outcomes, specifically SAQA's critical outcomes; questions that have arisen elsewhere in the world. As higher education institutions prepare themselves for the second round of programme submissions to SAQA in 2003, there is an incontrovertible need for evaluation, review, analysis and reflection in all sectors at all levels.

#### 1.2 AIM OF THE STUDY

This investigation, therefore, sought to provide for such an analysis. The report that follows presents a review of the literature from both a national and international perspective as it currently contributes to the debate surrounding generic learning outcomes, including the issue of their incorporation into programmes of learning. Thereafter a detailed analysis of a specific case study, as undertaken within the technikon sector, is described. It is hoped that the findings of this critical analysis, informed by the lessons learned from the literature, will assist those who are tasked with designing programmes of learning within this new framework. In the final analysis, therefore, the study aims to enhance the 'full personal development' of students and

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contribute both to the successful and practical implementation of this SAQA mandate as well as to the ongoing international debate.

#### 1.3 DESCRIPTION OF THE PROBLEM

While *critical* is defined in the *Oxford Advanced Learner's Dictionary* as 'decisive, crucial' (1993:283), *cross-field* implies transcending the different disciplines (fields) of study. *Outcomes* have been described by SAQA as 'the contextually demonstrated end-products of the learning process' (1997:17). Thus we have crucial end-products to the learning process which transcend discipline confines or, as SAQA has described 'those generic outcomes which inform all teaching and learning' (1997:16). Gultig (1997:73) suggests that within an outcomes-based education (OBE) framework, 'outcomes can be separated into essential outcomes ("critical cross-field outcomes"), which apply across a number of different fields, and specific outcomes, which are specific to a particular task'.

In the initial documentation released by SAQA in which the NQF was expounded, the critical cross-field outcomes were limited to seven generic outcomes or competencies, with a further five developmental areas added to complete the SAQA ideal for the full personal development of the learner and 'the social and economic development of the society at large' (*Government Gazette* 1997:48). SAQA's mandate to foster such development is found in the White Paper on Higher Education which defined one of the key purposes of higher education to be that of taking responsibility for 'the socialisation of enlightened, responsible and constructively critical citizens' (DoE 1997:3). This goal has since been echoed in both the Council on Higher Education's *Shape and Size* document (2000) as well as in the National Plan for Higher Education (2001). This plan states that it is vital to 'ensure that all graduates are equipped with the skills and competencies necessary to function in a modern society' (DoE 2001:5).

SAQA's twelve areas of competency have to some extent merged in popular practice and are listed in the table that follows.

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Table 1.1: SAQA's Critical and developmental outcomes

Cr	itical outcomes			
1.	Identify and solve problems in which responses that display that responsible decisions using critical and creative thinking have been made			
2.	Work effectively with others as a member of a team, group, organisation or community			
3.	Organise and manage oneself and one's activities responsibly and effectively			
4.	Collect, analyse, organise and critically evaluate information			
5.	Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation			
6.	Use science and technology effectively and critically, showing responsibility towards the environment and health of others			
7.	Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation			
De	velopmental outcomes			
8.	Reflecting on and exploring a variety of strategies to learn more effectively			
9.	Participating as responsible citizens in the life of the local, national and global communities			
10.	Being culturally and aesthetically sensitive across a range of social contexts			
11.	Exploring education and career opportunities			
12.	Developing entrepreneurial opportunities			

Source: SAQA 1997:5

As mentioned in the introduction, SAQA initially suggested that these skills or competencies should be embedded in the unit standards that would make up the different programmes. In the years since 1997, however, programme designers have often chosen not to go the unit standard route, rather preferring to register whole qualifications or programmes. It is necessary at this point, therefore, to briefly consider what is understood by *learning programme*. The National Commission on Higher Education (NCHE) (quoted in Fourie & Hay 2000:197) has argued that a programme be explained as 'the contents and offering of a distinct and well-defined configuration of knowledge, the successful study of which leads to standard qualifications'. In their final report the NCHE refined this initial definition adding the notion of 'sequential learning activities leading to the award of particular qualifications' (quoted in Fourie & Hay 2000:197). Luckett (quoted in Fourie & Hay 2000:197) takes this definition further by suggesting that '[a] programme is ... defined as a coherent combination of units of learning (modules) expressed in an outcomes-based format which lead to one or more

qualifications, which serve an academic and/or vocational purpose'. Within the context of this research, which will be described in considerable detail in Chapter Two, the term *learning programme* will be seen as it relates to a technikon diploma programme thus most closely aligned with the NCHE approach explained here.

In many instances the rationale among academic staff has been that the critical cross-field outcomes are often implicit rather than explicit in the learning programme, and therefore the extent to which curricula are really being changed to include the development and assessment of these outcomes remains relatively undetermined. Of concern is that while the critical cross-field outcomes are often patently visible in the written format, there is a sense that many are only paying lip service to the given criteria.

Writing from an Australian perspective, Clanchy and Ballard (1995:157) raised similar questions suggesting that at the time of writing, it did not appear that universities were 'involved in the kind of curriculum revolution that the literal adoption of such attributional outcomes for all its graduates would entail'. This comment reminds one that the debate surrounding generic learning outcomes is by no means a uniquely South African scenario. In fact, the skills debate had started elsewhere long before the creation of SAQA and the NQF. In 1991, the Finn Committee Report that assessed 'young people's participation in post-compulsory education and training' highlighted six 'key areas of competence' needed to develop stronger relationships between education, training and work (Australian Education Council 1991:1). The key areas listed at the time included understanding scientific and technological concepts, personal management, problem solving, cultural understanding and communication skills, and are thus closely linked to the SAQA list. This approach was further ratified in the report when 'generic skills, attributes and values' were described as 'the central achievements of higher education as a process' (in Clanchy & Ballard 1995:155). The following year, an Australian Higher Education Council report addressed the issue of generic skills, suggesting that these 'should be acquired by all graduates regardless of their discipline or field of study ... ' (Clanchy & Ballard 1995:155).

Worldwide there now appears to be a fair amount of consensus regarding the need for students at higher education institutions to display competence in terms of certain generic skills. The ongoing debate, however, as to what these skills are and how they should be acquired, developed and assessed, suggests that there is still much work to be done as far as their practical implementation is concerned. In Britain, for example, a number of 'initiatives to develop key skills as a relevant and necessary component of academic life at both undergraduate and postgraduate level have been taken by several universities' (EISD 1999:1). Many of these have been undertaken from varied perspectives. In an article in which he addresses higher education 'core skills', Preece (1999:90) discusses an affirmative action programme that was developed at Lancaster University during the late 1990s encompassing a 'flexible accreditation system of courses designed to equip people with a range of competencies or core skills which might increase people's ability to survive within the university system'. While Preece's approach to 'core skills' is focussed in terms of their higher education application, the skills themselves tend to reflect some of those found in the NQF documentation.

Byett (1999:188), on the other hand, takes the need for certain *core skills* a step further, suggesting that these are skills required to ensure success in the workplace. Once again, the list of skills he highlights is closely aligned with those of the NQF, namely *managing self, team work skills, communication skills* and the *managing of tasks*. Byett's argument also fits SAQA's contention that the critical cross-field outcomes encompass the skills needed for lifelong learning which could take place beyond the confines of the higher education institution, such as in the workplace. This rationale is seen in the work of Bennett, Dunne and Carré whose 'framework for the development of generic skills' (1999:78) is built on the same four pillars as those presented by Byett.

Bennett, Dunne and Carré further refer to the need for graduates to be equipped with core transferable skills to face a 'working life [that] will be about continued learning, skilling and re-skilling to stay ahead' (1999:72). It should also be noted that the 1997 Dearing Report which focused on the British higher education system, supported 'the further development of a range of what it calls 'key' skills' (Bennett, Dunne & Carré 1999:72) which similarly mirror several in SAQA's list. Further research confirms the belief that today's learners need to develop competencies in certain critical skills (Tait &

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Godfrey 1999; Gnanam 2000:147), and while the list of skills or competencies is not rigidly agreed to, there is no doubt that the list required by SAQA could realistically be described as representative of international trends.

The multitude of appellations given to the skills, critical, core, key, generic, transferable, etc., is rather confusing, especially in the light of NQF terminology where 'core' outcomes are defined as 'compulsory learning required in situations contextually relevant to the particular qualification' (SAQA 1997:15). The latter is something completely different from the cross-field outcomes under discussion here. In addition, it will be seen that researchers, commentators and other authors seem to use the words skills and competencies with similar indiscretion, and it is clear that there is a need for a more unambiguous and well-defined use of terminology. It is to be hoped, however, that as role-players in the South African context become increasingly familiar with the terminology used within the NQF, while remaining alert to possible alternative international interpretations, any confusion should, in time, be diffused.

Thus, the literature suggests a fair amount of congruency regarding the need for certain generic skills to be developed in the adult learner. The challenge manifests itself in the question of 'how-to-go-about-it' when facilitating the development of such generic outcomes as part of the course offering as a whole. The practical implications of incorporating these skills or outcomes into a programme of learning still warrant further investigation. A Nexus search revealed that while work has been done on incorporating specific learning outcomes (thus discipline-related outcomes) into programmes, a focus on the generic outcomes is absent. In this study, the researcher will attempt to articulate the best practice in the facilitation of generic skills as it appears from the literature, track the extent to which such practice is currently being implemented in a technikon diploma programme and assess the perceived effect on teaching and learning.

The research problem that will be addressed can, therefore, be encapsulated in the directive that all learning programmes incorporate and, indeed, integrate the critical cross-field outcomes, to promote the SAQA ideal.

#### 1.4 RESEARCH DESIGN

#### 1.4.1 Research approach

This research employed a post-positivist approach (EASA 2001), seeking to interpret and critique existing practice from the point of view of the higher education practitioner. The researcher endeavoured to maintain a practical focus throughout the study that provided for a critical analysis and review of existing practice, in order to highlight areas of best practice and offer a set of tangible and constructive recommendations.

#### 1.4.2 Research strategy

The nature of the research lent itself to using the case study, especially as this strategy allows for an in-depth study of, or focus on, a single specific instance or item that is usually qualitative in nature. Not only is the case study regarded as a strategy typical of post-positivist research, but Denscombe (1998:30) also claims that its use has 'become extremely widespread in social research, particularly with small-scale research' such as envisaged here. One of the key aspects that characterises the case study is that it creates a setting that allows the researcher to utilise a wide variety of methods, and work with different types of data. The case study offers an opportunity for providing a holistic view of a particular situation within its natural setting.

The setting that has been utilised is that of the Faculty of Management at the Cape Technikon. The technikon environment offered the researcher a unique opportunity in the light of the practical, career-oriented nature of its approach to teaching and learning. This approach, as will be seen in the study, lends itself admirably to an outcomes-based approach in the classroom. In addition, research in the technikon sector has highlighted the fact that fewer than 30% of students take the prescribed three years in which to complete their diplomas (Kok 1999:2.3.2). Furthermore, a recent survey conducted among academic staff in this same sector showed that 37% of respondents cited the under-preparedness of students for higher education as one of the main contributors to their current levels of frustration at work (Van Schalkwyk 2001:13). This concern is heightened when one notes the high dropout rates among students in higher education with 'retention rates in some sub-sectors of the higher education system [having] fallen by up to ten percentage points in the last two years' (DoE 2001:21). These issues all prompted questions regarding the extent to which higher education institutions in this

sector are designing programmes that incorporate the development of the competencies that SAQA has deemed necessary for lifelong learning, in a practical and meaningful way.

In this case study, the National Diploma in Human Resources Management programme, as currently offered at the Cape Technikon in the Faculty of Management, provided the focus for the research. The extent to which the generic learning outcomes, and in particular SAQA's critical cross-field outcomes, had been integrated into the different subjects within this programme, and the perceived effect on teaching and learning that such implementation had, was carefully tracked. The target population for the study included all full-time academic staff involved in this programme as well as the second-year, full-time diploma students.

In selecting the Human Resources Management diploma programme for the case study, various issues regarding suitability were taken into account. Firstly, students from this programme formed part of a sample used in earlier research by the author. In this earlier research the respondents had been asked to rate the extent to which they believed that the critical cross-field outcomes had been developed during their first year of study. Some of the responses obtained served to substantiate certain key assumptions made during this study. In addition, the Human Resources Management programme is one of the larger and more established programmes in the Faculty of Management, and can be deemed representative of the faculty in terms of gender and racial composition. Finally, the researcher's own knowledge of the diploma and the existence of good working relationships with the various lecturers further contributed to both the depth of the insights obtained and in establishing a rapport with the research subjects.

#### 1.4.3 Techniques for generating data.

Qualitative research is distinguished by the way in which it focuses on the subjective perceptions of those it addresses, thus allowing the researcher to study people 'in terms of their own definitions of the world' (Mouton 2001:194). In this study, the key was the extent to which the respondents had had a positive experience with regard to the incorporation of the critical cross-field outcomes in the various programmes. In order to

generate in-depth data, the researcher used not only appropriate collection techniques including individual interviews and focus groups, but also multiple techniques, including surveys and document analysis, to ensure the validation of the data, by means of triangulation (Denscombe 1998:85).

Three different techniques for generating data were used in this study. These techniques, which will be discussed in greater detail in Chapter Three, included the following:

#### Document analysis:

At the start of 2001, all academic staff in the Faculty of Management were requested to redesign their study guides in keeping with the SAQA requirements. In order to ascertain the extent to which the study guides for the fourteen subjects in the Human Resources Management diploma programme had incorporated generic learning outcomes in their design, these study guides were critically analysed to answer three key questions, namely:

- Whether the critical cross-field outcomes had been articulated as clear outcomes in the study guide.
- Whether the study guide reflected the teaching method to be employed in developing the skills.
- Whether the method of assessment had been articulated.

The evidence obtained from this analysis was to feed into the fieldwork that followed.

#### Interviews:

Two interview techniques were utilised in this study thus there was opportunity to obtain in-depth, qualitative data from both the academic staff and the students who attended their classes.

Firstly, the seven lecturers in the Department of Human Resources Management were interviewed in one-on-one, semi-structured interviews. The focus of these qualitative interviews was directed to some extent by what had been found in the relevant study guides, while staff were encouraged to discuss methodology currently used, if at all, in developing generic learning outcomes, and to share what they perceived to have been successful and/or problematic. It should be noted here that research conducted by the

author during 2001 clearly indicated that students perceived that the critical cross-field outcomes had indeed been addressed to a greater or lesser extent during their technikon studies (Van Schalkwyk 2001). The researcher was, therefore, now seeking to obtain a perspective from the staff.

Secondly, focus groups were conducted among second-year students. The formulation of the groups was based on judgement sampling, so as to ensure that the groups were representative of the faculty's student body as a whole. Each group was to consist of six to eight students. During these focus groups, students were encouraged to discuss their learning experiences, specifically pertaining to the critical cross-field outcomes, and to highlight those experiences that they believed had been beneficial. Denscombe (1998:115) suggests that this form of interviewing can often elicit 'exciting contributions from interviewees who might otherwise be reluctant to contribute' and the researcher hoped that this would contribute to a dynamic and meaningful discussion.

#### Questionnaires:

To further validate the data received during the focus groups and to obtain responses from a larger group, a questionnaire was constructed, based on the responses received from both the academic staff as well as the focus groups, and applied to all the second-year, full-time students in the diploma. The questionnaire was piloted prior to full implementation and it attempted to elicit data regarding specific classroom experiences, the techniques employed and the assessment practice. The questionnaire, therefore, gave the students the opportunity to rate the extent to which specific events that had been designed to develop the critical outcomes, were positively experienced and/or deemed beneficial.

# 1.4.4 Data analysis

The analysis of the data was completed in two distinct phases. Firstly the study guides were analysed and the data was grouped according to the three questions as listed in 1.4.3. Thereafter, the raw data obtained from transcribing the interviews and focus groups was referenced and grouped under key headings including issues of terminology; matters of process; approaches to teaching and learning; changing student profile; a holistic approach to curriculum design; and assessment practice.

This initial analysis then formed the basis for the design of the questionnaire. On completion of the survey, the responses were collated and cross-referenced to highlight patterns, trends, etc. This then led to the final analysis where all data gathered, including data highlighted during the literature review, was assessed in order to elicit the best practice, as perceived by both academic and student. These conclusions were eventually applied to formulate recommendations for future programme design.

Denscombe (1998:217), in his discussion on Glaser and Strauss's approach to qualitative research, cautions researchers to not run the risk of using their term, 'grounded theory', too loosely. Yet this researcher felt that the approach used in the study reflected many of the characteristics they purport, as it involved 'constant checking of the analysis (theories, concepts) against the findings and a constant refinement of the theories and concepts during the process of research' (Denscombe 1998:215). This notion of refining concepts as the research process continues, will be highlighted again later in the study.

#### 1.5 SCOPE OF THE RESEARCH

This study focused on the National Diploma in Human Resources Management as currently presented full-time in the Faculty of Management at the Cape Technikon. It did not include part-time studies, the postgraduate degrees offered within the Human Resources department, any other diploma programmes in the faculty, or in any other faculty at the Technikon. While the study guides of all fourteen subjects offered within the diploma programme formed part of the initial assessment, interviews were only conducted with full-time members of staff who had been responsible for the various subjects for at least one full year, thus no new members of staff were involved.

The focus groups and the survey were conducted among the second-year, full-time students only. The focus groups were drawn from students who were currently registered for a complete second year and did not, therefore, include students who were repeating first-year subjects.

#### 1.6 ETHICAL STATEMENT

The fieldwork and subsequent analysis of this research project was conducted in the spirit of making a meaningful, relevant and genuine, albeit small, contribution to the process of curriculum design within the existing South African context. Every attempt has, where appropriate therefore, been made to protect the identities of those involved and to present all contributions correctly without any misinterpretation.

#### 1.7 SEQUENCE OF CHAPTERS

In this opening chapter the reader has been given an overview of the study that is described in considerably greater detail in the chapters that follow. The purpose has been to orient the reader to the research and to provide a background to the context that has motivated the study. Similarly, the aim of the research has been clearly articulated while a brief outline of the design, structure and plan of the research, as well as the methodology employed, has been supplied (Mouton 2001).

Chapter Two follows with a detailed overview of the literature that addresses the issue of generic learning outcomes, chronologically presenting the evolution of the skills debate both nationally and internationally. In addition, the literature review provides insights as to current practice when integrating generic learning outcomes. Chapter Three describes and justifies the research design, including the techniques used in gathering data and the approach to analysis. In this chapter, reference is also made to the researcher's endeavour to ensure the validity and reliability of the research.

Chapter Four gives a detailed account of the findings of the empirical research, while Chapter Five provides the synthesis, addressing the conclusions drawn and their implications, and finally closing with recommendations for future practice and further research.

#### 1.8 CONCLUSION

This research should be seen in the context of 'work in progress', an aspect that will be attested to in the pages that follow. Many of the sources used in this study reiterate that there are still many questions unanswered. In South Africa, where new curricula have yet to be tested, there is a need for in-depth, analytic, longitudinal studies that will track

the impact of incorporating generic learning outcomes into programmes of learning at higher education institutions over a period of time. This study, with its specific context and focus, provides a prologue to research that should ideally follow. It is hoped that it will offer the practitioner additional insight along the way, and perhaps, an opportunity for reflection.

Chapter Two follows with an overview of the literature relevant to this study. It presents a historical perspective of the factors that have led to the current focus on generic skills, discusses the debate surrounding terminology in common use, and provides an account of some of the many aspects that impact on the integration of generic skills into learning programmes.

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#### **CHAPTER TWO**

#### An overview of the literature

The NQF is slowly emerging from its almost conspiratorial world of arcane acronyms and inaccessible terminology ... [t]he possibility is increasing that the NQF will be 'made by walking the road' ... we must think and talk this through, sooner rather than later, in order to create a better system that delivers crucial value to a country still on a knife-edge of success or failure.

(Gevers 1999:2)

#### 2.1 INTRODUCTION

The establishment of the South African Qualifications Authority (SAQA) in 1995, along with the introduction of outcomes-based education and the National Qualifications Framework (NQF) during the mid-1990s, not only heralded a new era in education, including higher education, but also sparked debate and rhetoric which is still far from resolved. SAQA's early vision was one of 'contributing to the full personal development of each learner and the social and economic development of the nation at large' (SAQA 1997:4) and key to its earliest proceedings and decisions was the notion of 'critical cross-field education and training outcomes' (SAQA 1997:4) which have become known in abbreviated form as 'critical outcomes'. SAQA believed that the incorporation of these outcomes would facilitate such personal development, and it recommended that they should, albeit partially, be incorporated into programmes of learning.

As explained in Chapter One, such incorporation is the focus of this study. However, for the work to be meaningful and of value, it is necessary to confront the many uncertainties and 'contested notions' (Bennett, Dunne & Carré 1999:74) that contribute to the debate surrounding generic learning outcomes, both nationally and internationally. Therefore, in keeping with the stated objective of a literature review which should 'seek to describe, summarise, evaluate, clarify and/or integrate the content of primary reports' (Cooper quoted in Bruce 1996:143), the author will attempt to clarify and conceptualise relevant terminology, particularly the multitude of appellations that currently are in use worldwide to refer to these generic learning outcomes, and the different contexts in which they occur within the higher education sector.

#### 2.2 A HISTORICAL PERSPECTIVE

Chapter One briefly defined the concept of 'critical cross-field outcomes' within the SAQA structure, introduced the reader to these outcomes, and alluded to the status quo in higher education internationally in respect of these and similar outcomes. It is, however, necessary to address these issues in greater detail and to track the evolutionary process in higher education that eventually led to not only the SAQA mandate for integration, but to a worldwide shift in focus from subject specialist to employable generalist. At the same time, as the unfolding of this process is outlined, the terminology will be clarified to eliminate the possibility of further misinterpretation.

Several factors have led to the various role-players in the higher education sector, including academic staff, management, employers and researchers, calling for more attention to be paid to the development of skills or competencies that were not necessarily discipline bound. In the following sections, these factors will be discussed. Although the issues are addressed under separate headings, this does not in any way imply that the process has been so clearly delineated nor that it followed chronologically as the order might suggest. In some instances, the development was congruent, in others, reactive. While most of the forces discussed below had an international impact, the extent of such impact was not evenly distributed across the globe, with some countries being directed more by one dynamic and less by another depending on national and local contexts. These differences have been described in Chapter One when addressing the different perspectives displayed in, for example, the work of Bennett, Dunne and Carré (1999); Byett (1999) and Preece (1999), and will be discussed in greater detail in this chapter.

# 2.2.1 Impact of globalisation

It is, perhaps, facile to commence by laying the responsibility of all the change that has taken place in higher education during the past two decades solely at the door of globalisation, but many researchers worldwide agree that the impact of this phenomenon has been dramatic and transforming (Gibbons 1998; CHE 2000; Giddens 2000; Grové 2000). Giddens (2001:1) says that 'the debate now is about the consequences of globalisation, not about the reality of globalisation', and one of these consequences has been the shift in focus to developing skilled and able graduates.

It is difficult to define globalisation as it most often is contextualised in terms of its impact and how it is perceived, rather than defined. Yet there can be little doubt that it has resulted from the technological revolution that has traversed the globe. revolution has left in its wake a new order that has shaken higher education to its Almost overnight, knowledge has become the new currency easily accessible to the masses, and those who generate and process such knowledge are the ones who are regarded as rich in capital. This new order is encapsulated in recently spawned terminology such as 'knowledge society' and 'learning society' and implies a shift in our approach to both knowledge and learning, as it has existed to date (NCHE 2000:4). In this vein, the World Declaration on Higher Education (1998:1), as accepted in October 1998 acknowledged, in its preamble, the 'unprecedented demand for ... diversification in higher education .... [where] the younger generations will need to be equipped with new skills, knowledge and ideals'. While the positive and negative implications of the forces of globalisation will not be addressed in this study, it is this unprecedented demand ... for new skills that is one of the keys to the debate surrounding generic learning outcomes.

The idea of an unprecedented demand is taken up in the literature under the notion of massification in higher education, a process that has been gaining momentum since the end of World War II. Many institutions have found themselves receiving applications from a far broader social base and a more balanced gender spread (Gibbons 1998). This process, which accelerated as the twentieth century drew to a close, was largely propelled by political demands for increased access to institutions that had previously been regarded as 'elitist' on the one hand, as well as the opening up of institutions offering alternative approaches to further and higher education, including the technikons, polytechnics, TAFE colleges, community colleges, etc., on the other. As Scott (1997:15) suggests, '[h]igher education, once marginal, has become socially pervasive ... ' with increasing numbers of students being drawn from 'non-traditional' sectors of society, including many more mature students, as 'the need to address the inequitable distribution of undergraduate places across all socio-economic groups' was acknowledged (Preece 1999:89). Increased access, however, led to greater numbers and an increase in students 'whose prior acquaintance with academic culture, through school or family influences, has been limited' (Scott 1997:24), entering the higher education system at a time when the technological revolution was demanding 'a higher level of skills and knowledge' (Gibbons 1998:21). In South Africa the process of the massification of higher education has been further advanced by the political transformation that has taken place as increased access has been facilitated particularly for previously disadvantaged citizens (First-year intake up by some 14% 2002:1).

Globalisation demands that countries produce skilled citizens who are able to effectively access the available knowledge, internalise it, produce new knowledge and employ it to the betterment of society as a whole. It becomes self-evident, therefore, that this new generation of learners will have to be endowed with certain generic skills, specifically relating to technology, that will ensure their efficacy in the new global society which 'increasingly requires professionals to be able to live and work effectively at home and abroad in contexts where cross-cultural awareness and understanding and international perspectives are essential' (Nunan, George & McCausland 2000:62).

Furthermore, in such a rapidly changing world where the shelf-life of much knowledge has been reduced to only a few years, the 'notion of lifelong learning' has gained impetus as the adult learner needs to have the opportunity to hone her or his skills and add to her or his frame of reference within a 'changed and changing learning environment' (Nunan, George & McCausland 2000:62), thus adding another perspective to the skills debate.

# 2.2.2 A new teaching and learning paradigm

The impact of globalisation, the increased numbers of learners as a result of mass access, and the need for a lifelong approach to learning, paved the way for a new approach to the notion of teaching and learning. This demand for new knowledge and skills implied a new focus; one that takes us away from the learner's simply acquiring the knowledge needed to pass an exam, to the point where a learner is assessed based on what he/she takes into the job market; a market that is calling for a mastery of skills, particularly in the fields of communication and technology (Grové 1999:13). During the mid-1990s much was made of this 'new paradigm in knowledge production' (Subotsky 2000:5) or the extension in knowledge production from Mode 1 knowledge, generally accepted as the 'orthodox disciplinary knowledge production and learning' (NCHE

2000:7) to include that of Mode 2 which is characterised as being transdisciplinary, problem-solving, generated within the context of the application and 'socially useful' (Kraak 1997:60).

In his address at the Millennium Minds conference in 1999, Grové suggested that globalisation cannot exist without technology, and 'knowledge workers' who need the skills to deal with such technology. If they are to adapt, higher education institutions will be forced into reconsidering their existing curricula and seeking ways in which these can be redesigned to allow for an individual, learner-centred approach that will create an environment in which the acquisition of such skills and the process of Mode 2 knowledge production can successfully occur — 'if the nature of the work changes [it stands to reason that] the nature of education must change' (Grové 1999:34). This opinion is echoed by Bennett, Dunne and Carré (1999:73) who suggested that the evolution from Mode 1 to Mode 2 knowledge could be likened to a displacement in ideology, 'in essence a shift from contemplative to operational . . . knowledge which equips students with skills and competences of value in the workplace'.

While the debate surrounding Mode 1 and Mode 2 knowledge was central to many of the discussions within higher education circles in the United Kingdom, across the Atlantic another shift to a new paradigm, the *learning paradigm*, (Barr & Tagg 1995) was being expounded in the United States. While the former referred to types of knowledge, the latter focused on the practice of teaching and learning. Scott (1997:24) suggested that the 'crisis of knowledge influenced the practice of teaching' that required more innovative methods of assessment, modularisation and a new focus on 'personal transferable skills and generic competencies', all practices that were implicit in Barr and Tagg's learning paradigm. According to Angelo (1999:100), 'inherent in this learning paradigm [is] a radical shift from the usual quantitative, credit-hour and head-count based model of undergraduate education to a more qualitative, competency mastery based view'.

Barr and Tagg's focus was on learner-centred education, creating environments conducive to learning with a focus on quantity and quality of outcomes. The transdisciplinarity of Mode 2 learning was mirrored in the suggestion by the two

researchers that a cross-disciplinarity characterised the learning paradigm. Here the learner would be awarded a degree that 'would certify that [she/he] had demonstrably obtained specified knowledge and skills . . . thus [moving] away from educational atomism' moving towards a holistic approach (Barr & Tagg 1995:21). The role of these new paradigms in developing generic learning outcomes will be revisited later in this study.

#### 2.2.3 Transformation in South Africa

While the international debate regarding skills was gaining momentum, South Africa held its first democratic elections in 1994. It soon became clear that higher education would not be left unaffected by the political transition and that government would place a huge responsibility on higher education to effect transformation. In as early as December 1994, with the establishment of the National Commission on Higher Education, 'the themes of massification, skilled citizenry, accountable governance, enhancing the social utility of new knowledge and research partnerships' (NCHE 2000) were introduced, mirroring some of the issues that have been addressed earlier within the ambit of globalisation. Similarly, in their *Size and Shape* document, the Council on Higher Education discussed the development of a global *knowledge society* placing the responsibility to act as catalyst for the resulting process of knowledge production firmly at the door of South Africa's institutions of higher learning (CHE 2000). This document continued by stating that the 'critical value of higher education to society lies in its ability to provide graduates with thinking and practical abilities that can both enrich society and enhance its development considerably' (CHE 2000:30).

The 2001 National Plan for Higher Education in South Africa (DoE 2001:9) expanded on this theme, claiming that 'the key issue is to ensure that all graduates are equipped with the skills and competencies necessary to function in modern society, in particular, computer literacy, information management, communication and analytical skills' (DoE 2001:5). These statements would suggest that the Department of Education was well informed of the demands being placed on higher education worldwide and the need for South African institutions to become appropriately positioned.

# 2.2.4 Skills for learning versus employability

The concepts of advancing academic success for all learners in the new global economy, on the one hand, and employability, on the other, have been mentioned in earlier sections, including the different approaches of Byett (1999) and Preece (1999) as discussed in Chapter One. It is, however, relevant to briefly revisit these issues given the contribution they have made to the focus on generic skills and the extent to which researchers have emphasised either the one or the other.

The drive to develop generic skills has been fuelled from a number of perspectives. Some researchers have suggested that learners need to be equipped with certain skills prior to their embarking on higher education studies as these might 'help students prepare more successfully for their higher education experience' (Preece 1999:89). In similar vein, the Dearing Report (1997) recommended that higher education institutions develop their admission procedures 'to value good levels of competence in communication, numeracy and practical use of information technology' (quoted in Gnanam 2000:149). On the other hand, there are those who adhere to the rationale that has been described in the opening sections of this work, namely that society and the world of work are demanding certain competencies or skills to be visible in graduates in order to enhance their employability. Steven and Fallows (1998:1) have stressed that 'higher education institutions must recognize that for many students the transition from education into employment is not a straightforward matter and in the past many students have been ill-equipped for this transition'. They continue by suggesting that 'the academic knowledge will for most students never be utilized directly in any Similarly, Bennett, Dunne and Carré (1999:72) cite a employment context' (1998:1). number of surveys which confirm that employers are seeking more generic than 'technical skills defined with narrow occupational ranges' in their employees.

Gnanam (2000:147) contributed to this debate by suggesting that 'the job market and society at large no longer demand subject knowledge and subject-related skills only, but they also require the level, range and maturity of general competencies that higher education can provide' and that it is the responsibility of higher education to ensure that programmes are both designed and delivered to ensure the entrenchment of such competencies. Similarly, much of the literature emanating from Australia has underlined

the need for higher education institutions to change curricula and approach 'in order to better meet the requirements of employers for graduates who are more *fit for purpose*' (De la Harpe, Radloff & Wyber 2000:231).

In the United States there is a sense that 'for most Americans there will be progressively less emphasis on traditional degrees and more on the validation of competence. Higher education's imperative role in re-tooling America has been clearly identified' (Leckey & McGuigan 1997:367). In fact, in the United States, some universities have responded by implementing *general education programmes* which are described as having 'a Common Core of foundation skills in critical thinking, mathematical reasoning, and written and oral communication, which are fundamental to success in further intellectual endeavour' (Northern Kentucky University 2002:2). Such programmes, however, stand apart from the specific discipline or 'major' subject, and thus do not relate directly to a discussion that has, as its focus, the issue of integration. This issue of integration versus discrete courses will, nevertheless, be referred to again (2.4).

Thus a call for 'new skills' in order to be effective in a global economy; for transdisciplinarity and the removal of subject-specific boundaries; for a change in teaching that places the focus on the learner; for programmes and curricula that create environments where learners can develop the skills that will enhance their employability; and a legislated mandate placing the responsibility of contributing to the 'full personal development of the learner'.

#### 2.3 THE SKILLS DEBATE

Simply accepting the imperatives underlying the need for transformation, however, is not nearly enough. As has been hinted at in the first chapter of this thesis, one of the biggest challenges confronting the academic is the lack of clarity that exists with regard to these issues. The problem with the 'skills agenda' (Holmes 2000:202), is that the debate is not linear. The many variables result in a multi-facetted controversy that still has numerous loose ends, specifically in both the usage and interpretation of terminology. It is not singularly a matter of defining appropriate terminology, which seems to differ from country to country, and even from institution to institution.

Currently consensus is still being sought as to what exactly constitutes such essential or generic skills. Then many question the extent to which generic skills, obtained in one context, are truly transferable to another and, finally, how these skills might best be developed in a learner. Fortunately, there appears to be some agreement among researchers (Steven & Fallows 1998; EISD 1999; Harvey 1999; Jacobs 1999; Preece 1999; Gnanam 2000) 'that today's student population would benefit from receiving explicit training in generic skills' (Tait & Godfrey 1999:245). In as early as 1994 the Committee of Vice-Chancellors and Principals (CVCP) in the UK stated that 'graduates will increasingly require core transferable skills' (Bennett, Dunne & Carré 1999:72), and in South Africa, the inclusion of the critical cross-field outcomes in the SAQA declaration affirms similar agreement. Using this as vantage point, an overview of some of the terminology and interpretations prevalent in the literature will be given to contribute to a clearer and joint understanding of the approach and terminology that have been used in this study.

# 2.3.1 The terminology debacle

There is considerable semantic confusion surrounding the skills agenda and there are a number of issues that contribute to the confusion. In as early as 1989 in the United Kingdom, Slee cautioned that 'if higher education is to meet the needs of the economy and the individual it must seek actively to develop [these] generic core competencies' (quoted in Bennett, Dunne and Carré 1999:72), 'these' being personal transferable skills such as problem solving, teamwork and communication. *Generic core competencies* became *core transferable skills* in the CVCP statement mentioned earlier, and by 1997, when the Dearing Report, which was to stipulate very clear guidelines for the development of generic skills in higher education in the UK, appeared, the name had changed again to *key skills* which were defined as *communication*, *numeracy*, *information technology* and *learning how to learn* (Bennett, Dunne and Carré 1999:72).

However, in spite of its government credentials, not all in the UK ascribed to the Dearing Report's terminology, again contributing to the confusion. Preece, (1990:90) writing from the University of Lancaster, re-visited *core skills* describing them as a critical elements of the higher education learning experience. He further suggested that such core skills could be divided into groups:

- > those which call for learning that leads to transformation;
- > those which focus on employability;
- ➤ those which might be deemed crucial to aspects of "studying" including information retrieval and research – a notion which has been discussed earlier in this chapter;
- > and those which might focus on information technology, as well as being able to see the links between what is learned and the implementation thereof in the outside world, thus meeting up with the globalisation debate.

As mentioned earlier, the term core skills is also found in the work of Byett (1999:188) who, writing from a South African perspective, explained '[c]ore, or transferable skills' as 'generic skills'. While this fluid use of the terminology highlights the potential for confusion, Byett did continue by defining these as the ability to manage self, teamwork skills, communication skills and the managing of tasks (1999). Byett's (1999:76) list mirrors that found in the work of Bennett, Dunne and Carré (1999), which offers several perspectives in terms of the terminology debate, finally opting for the label of generic representing 'the skills which can support study in any discipline, and which can potentially be transferred to a range of contexts, in higher education or the workplace'. Their study led to 'a framework for the development of generic skills' which defined the various skills under four main groupings, including the management of self, the management of information, the management of others and the management of tasks. The authors believed that this framework could be applied within a variety of contexts including both a higher education course and the workplace, and could serve as a guideline to the academic tasked with addressing generic skills in a study programme. The word management, however, carries a connotation of controlling as opposed to demonstrating competence, and thus perhaps detracts from the utilitarian nature of the model itself.

On the other hand, the Dearing Report's reference to key skills (in Bennett, Dunne & Carré 1999) echoed terminology that had been used in the Finn Report (1991), which had appeared in Australia some years before. This latter document referred to 'key areas of competence' namely: language and communication; mathematics; scientific and technological understanding; cultural understanding; problem solving; and personal

and interpersonal characteristics; thus including far more than was later articulated by Dearing. The Australian approach to key competencies was further ratified in the Higher Education Council's Mayer Report in 1992 (Edith Cowan University 2001). The seven key competencies that emerged as a result of this report are detailed in Table 2.1 and are particularly significant to this study given the parallels that can be drawn between this list and the list that was later compiled by SAQA. (See Table 1.1.)

Table 2.1: The Mayer Report key competencies

Key Competencies	Definition	
Collecting, analysing and organizing ideas and information	The capacity to locate information, sift and sort information in order to select what is required and present it in a useful way, and evaluate both the information itself and the sources and methods to obtain it.	
Communicating ideas and information	The capacity to communicate effectively with others using the range of spoken, graphic and other non-verbal means of expression.	
Planning and organising activities	The capacity to plan and organise one's own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance.	
Working with others and in teams	The capacity to interact effectively with other people both on a one-to-one basis and in groups, including understanding and responding to the needs of a client and working effectively as a member of a team to achieve a shared goal.	
Using mathematical ideas and techniques	The capacity to use mathematical ideas, such as number and space, and techniques, such as estimation and approximation, for practical purposes.	
Solving problems – critical thinking; decision making; creative thinking and analysis	The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the desired solution are clearly evident and in situations requiring critical thinking and a creative approach to achieve an outcome.	
Using technology	The capacity to apply technology, combining the physical and sensory skills needed to operate equipment with the understanding of scientific and technological principles needed to explore and adapt systems.	

Source: Edith Cowan University 2001.

The fact that this report defined its competencies may be deemed particularly beneficial as it helps to eradicate some of the confusion and may assist the programme designer when having to incorporate such skills. Later in this study the usefulness of such definition will be acknowledged (5.3.1).

As was noted in Chapter One key skills or competencies did not, however, find voice in all literature emanating from Australia. Another Higher Education Council report entitled

Achieving Quality, and also published in 1992, suggested that a learner who had been exposed to a 'high quality higher education system' would acquire a set of 'generic skills, personal attributes and values' (in Clanchy & Ballard 1995:155) which would transcend disciplinary boundaries. This publication then went on to describe and define, stating that these generic skills, attributes and values should be seen as pivotal to the process of higher education and include 'such qualities as

- critical thinking;
- intellectual curiosity;
- > problem-solving;
- logical and independent thought;
- effective communication and related skills in identifying, accessing and managing information;
- > personal attributes such as intellectual rigour, creative and imagination; and
- > values such as ethical practice, integrity and tolerance' (in Clanchy & Ballard 1995:157).

The report was not received positively in all quarters, however, largely because it was found to not be impervious to close scrutiny. Clanchy and Ballard (1995:158) highlight several instances where terminology is used loosely and interchangeably with the word *skills* being replaced by *competencies* at random and the delineation between skills, attributes and values also being questionable. In fact they queried whether, given the abstract and personal nature of 'personal attributes and values', it was even 'appropriate to ascribe to universities responsibility for the development in students of such . . .'. These two authors sidelined themselves from the *Achieving Quality* report, by eventually promulgating just three 'main areas of activity' in terms of generic skills, namely thinking, research and communication.

Soon after the appearance of the *Achieving Quality* report, the 1993 New Zealand Curriculum Framework compiled a set of eight essential skills deemed important at school level. While some of these skills mirrored those of the Australian report, for example 'problem-solving' and 'communication skills', new additions were seen in 'physical skills' and 'co-operative skills' although the latter could be seen as being related to working in teams (Oliver & McLoughlin 1999:2).

Writing from an Indian perspective, Gnanam (2000:148), on the other hand, speaks of 'subject-neutral competencies' that are then divided into cognitive and general skills. The list of these once again mirrors those which have been outlined thus far, including the ability to evaluate and analyse information, solve problems, work in a team, communicate effectively and so forth.

Another term found 'in common parlance within education' (Fallows & Steven 2000:8) is that of 'transferable skills' implying skills that might be developed within one context and then used (transferred) to another. Such 'transferable skills' deemed to be 'significant in a professional career' might include making oral presentations; working in groups; presenting clear recommendations and practical outcomes; an ability to cope under pressure; an ability to tackle complex problems; and an ability to summarise key issues clearly (Clarkeburn, Downie, Reid & Beaumont 2000:133). The extent to which such skills are, in fact, truly transferable, is still questioned by many researchers and is an issue that will be highlighted in the findings of the study (4.3).

It is interesting to note that even the researchers themselves use different terminology within different contexts. Steven and Fallows (1998:5), cited earlier as having referred to 'transferable skills', opted for the term 'employability skills' when they delivered a paper at a conference in 1998. In this instance they defined employability skills as being grouped 'under four main headings:

- Information retrieval and handling.
- Communication and presentation.
- Planning and problem solving.
- Social development and interaction'.

While most of the issues surrounding generic skills appear to be concentrated in the last decade of the previous century, it is of interest to note that Alverno, a women's college in the USA, designed and implemented what they termed 'ability-based education' in the early Seventies (O'Brien 2000:33). They likened the term 'abilities' to what others have called 'employability skills and learning outcomes', believing them to be 'inherent in the practice of their disciplines . . . to be developed and demonstrated by students in an

integrated manner across the curriculum' (O'Brien 2000:33). In addition, their list of abilities again mirrors those that have been addressed earlier namely:

- communication (including analytic reading, writing, listening, speaking, quantitative literacy, computer literacy, and media literacy);
- > analysis;
- > global perspectives;
- problem solving;
- effective citizenship;
- valuing in a decision-making context;
- aesthetic responsiveness;
- ➤ social interaction (O'Brien 2000:33-34).

This list demonstrates considerable consensus with the list of critical outcomes provided by SAQA. The experience at Alverno College will be discussed in greater detail later in this chapter (2.4.3), as it offers one of the few case studies that has a history of more than twenty years of implementation.

#### 2.3.2 The South African context

The name given to the generic skills as articulated by SAQA, that of *critical cross-field outcomes*, has been analysed in the first chapter. It is, nonetheless, valid to consider how some South African researchers have contributed to the conceptualisation of these learning outcomes. Before the legislated move to outcomes-based education (OBE) in South Africa, an approach known as competency-based education (CBE) was particularly prevalent among those who focused on 'the setting of objectives in observable behaviour on account of specified competencies' (Jacobs 1999:136). Such competencies were associated with efficiency on the job, and even in current jargon the terms 'outcomes' and 'competencies' are used interchangeably particularly in the training sector. It was, however, felt that while the CBE focus was of a more 'psychomotor' nature, SAQA accepted a more sophisticated notion of competence, applied competence, or 'the ability to put into practice in the relevant context the learning outcomes acquired in obtaining a qualification' (in Jacobs 1999:137). This echoed the sentiments of the 'transferable skills' lobby group.

Thus, the potential for misinterpretation relates not only to the term 'skills' which are also referred to as competencies, attributes, values, and so forth, but also to the way in

which such skills are described: generic, essential, core, critical, transferable, key, subject-neutral, common, graduate - the list continues. The first problem arises because many of the terms used are, by dictionary definition, not necessarily synonymous and one could enter into a long linguistic debate about the many different connotations of all the terms. A further problem relates to the use of certain terms in completely different contexts, such as the usage of the term *core* that, as discussed in Chapter One, has been given a completely different meaning in SAQA terminology. For this reason, the researcher has opted to use the term *generic learning outcomes*; *generic* being the word that does appear to be most common in the literature and the word which, by dictionary definition, implies 'not specific; shared by a whole group' (Oxford Advanced Learner's Dictionary 1993:514) which is the intended meaning. Meanwhile, learning outcomes places the term in a South African OBE context.

## 2.3.3 Aspects of interpretation

The literature has shown similar diversity regarding what the many different terms referred to above actually imply. In an attempt to facilitate consensus, Fallows and Steven (2000:8-9) have suggested that the following appear to be fairly universally accepted:

- > 'Communication skills: using a range of approaches.
- Information management skills. Information management is central to higher education as students develop their ability to retrieve, evaluate, analyse and utilize information from a range of sources in an appropriate manner.
- Skills in using modern communications and information technologies such as e-mail, word-processing and data handling for a range of common tasks.
- > People skills such as group working, ethics and recognition of diversity.
- Personal skills such as time management and recognition of personal responsibilities.'

Given that these reflect SAQA's critical outcomes, they can be accepted as definitive in the broader context of generic learning outcomes in this study.

Although much evidence has been presented to reflect fair consensus regarding the importance of developing generic learning outcomes, the vote is far from unanimous. The concerns of Clanchy and Ballard have already been cited and are borne out by

others such as Holmes (2000:202) who suggested that the 'skills agenda. . . has been shown to be fraught with many difficulties and problems' including the debate surrounding the terminology as well as the notion of the transferability which is termed 'highly questionable'. Barnett and Griffin (1997:5) speak of the crisis facing higher education where 'the utilitarian ethos of competency has thus begun to find a grip on higher education with its emphasis on skills, performance criteria and measurable outcomes' threatening 'the achievement by the learner of broader intellectual qualities, knowledge and understanding'. Their concerns are echoed even more forcefully by Malherbe and Berkhout (2001:62) who, in an article on the NQF, and thus indirectly the re-curriculation that it implies, speak of the 'unconstitutional limitation of academic freedom'.

It is inevitable that with so many variables open to a plethora of interpretations, there will be dissention in the ranks; dissention that cannot summarily be discounted. In South Africa, however, we must question whether we can allow ourselves the luxury of such diversion as we face the reality of addressing the challenges that present themselves so forcefully. With only 15% of the relevant age group involved in higher education, this compared with the 21% found in most middle-income countries (CDE Round Tables 2000:1), the pressing needs in higher education in the country should ensure a focus on the task at hand.

#### 2.4 THE QUESTION OF INTEGRATION

The discussion thus far has led to a point where it can now centre on actual implementation, the 'how-to-do' or 'how to go about' developing generic learning outcomes in programmes for higher education learners – hence, the focus of this study. Therefore, before closing this chapter that has reviewed the literature which serves as backdrop to the study, it is necessary to allude briefly to some of the fundamentals relating to developing generic skills and consider a number of case studies which describe different approaches to integration, as a precursor to the analysis that will be described in Chapter Four.

## 2.4.1 Add-on or integration

An issue that has been raised in the literature is the question regarding whether generic learning outcomes should be developed by means of an add-on course or module that might, for example, run parallel to the other courses that would comprise a particular programme rather than being integrated into a discipline-specific programme. Clanchy and Ballard (1995) were particularly specific about this process, stating that generic skills could 'only be developed within specific contexts of knowledge' and in this aspect they were in agreement with the HEC report which had, some years earlier, also stated that the generic skills would be 'introduced and refined in a subject-related context' (in Clanchy & Ballard 1995:160). Others report on the development of such generic learning outcomes prior to commencing with higher education studies, such as the experience at the University of Lancaster and the University of Port Elizabeth (Preece 1999) that has been mentioned earlier; or as a prerequisite, but separate, programme (Northern Kentucky University 2002). In view of the fact that the SAQA mandate is for the generic learning outcomes to be embedded in the programmes of the disciplinespecific courses, however, this study will be limited to investigation of this latter approach.

# 2.4.2 The role players

The discussion thus far has paid scant regard to the two key role players in this whole process, namely the teacher and the student; the academic and the scholar; the facilitator and the learner. Implied throughout has been a mute acceptance of the challenge, or burden, placed at the academic's door and the assumption that learners are eager to immerse themselves in whatever the new approach offers. When Clanchy and Ballard (1995:157) wrote their critique of the Australian HEC's report on generic skills, they suggested that no matter how one looked at the concept of developing generic learning outcomes in learners, the one unequivocal fact was that such development would of necessity impact on the teaching and learning processes, sentiments echoed by many others as has been seen earlier in this review. Clanchy and Ballard (1995:157), however, postulated that at the time of writing, there was little evidence of the 'curriculum revolution' that ought to accompany such integration. Their suggestion, that 'perhaps a great deal of this [debate surrounding generic learning outcomes] is merely display for political purposes' (1995:157) echoes the concern

raised in the opening chapter of this thesis and highlights issues regarding quality and consistency, important variables in the implementation process, which will be addressed more fully in later chapters. Is this true? Is the academic desirous to embrace a new philosophy and is she or he equipped to do so? The literature speaks of numerous initiatives worldwide which bear testimony to extensive involvement, but few studies appear to have assessed the perceptions among the staff members who are responsible for facilitating the processes. This issue will be addressed once again in the case studies that follow in paragraph 2.4.3.3.

In the meantime, however, the perceptions of and attitudes towards generic learning outcomes among learners appear to have elicited further controversy. Research conducted by Laughton and Montanheiro (1996) at the Sheffield Business School in the UK among learners who had completed a Higher National Diploma which had presented 'common skills' embedded in the design and delivery of the programme, expressed several concerns. Key among these related to 'the complexity of the common skills strategy' as well as 'a perceived lack of academic status or merit of the common skills profile among the HE academic' (Laughton & Montanheiro 1996:21). On the other hand, research conducted in South Africa at Rand Afrikaans University (RAU) (Jacobs 1999:140) and at the Cape Technikon (Van Schalkwyk 2001:13) showed that over 85% of learners surveyed felt positive about the development of generic learning outcomes during their studies. These responses among learners should, however, be carefully analysed in terms of the context within which the development occurred, the design of the curricula, the delivery thereof and the method of assessment used – to name only the key variables. Such analysis is addressed in Chapter Four.

Of note is that while the universities are challenged to re-assess their entire learning strategy, the technikons, which have entrenched their roles as providers of practical, hands-on education and training, are eminently positioned to fulfil the 'growing demand for skilled professionals in the scientific, technological, technical and business fields' (CHE 2000:1). This is especially valid given the expanded access policies of most technikons which do not turn away students who have not obtained a matriculation exemption. Such students, in particular, need to acquire the generic skills that result in graduates who are both flexible and able to adapt, while they also develop much

needed critical thinking skills – such development classified by Entwistle (in Tait & Godfrey 1999) as the most important aim for higher education. Further to this is the call for a future workforce that will be able to play a crucial role in the development of South African society.

## 2.4.3 Specific case studies

Thus far this review of the literature has offered a wide perspective of the many issues relating to the generic learning outcomes. This last section focuses on aspects relating to actual integration. In keeping with the original aim of the study that committed to a practical approach, it is relevant to provide an overview of a number of specific case studies that relate specifically to the integration of generic learning outcomes across the world. This discussion includes studies from the Dublin City University Business School, the University of Central London, Curtin Business School, University of Luton, Edith Cowan University, Alverno College, University of South Australia and the University of Nottingham. While this list includes institutions from the UK, the US and Australia, their stories tell similar tales and in this review are, therefore, summarized under four key themes common to all the case studies reviewed, namely process, curricula, staff development and reflection.

#### 2.4.3.1 Process

In each case study that was reviewed, the researchers have described the factors that led to the initiation of the skills debate and how the process unfolded in response. The studies reflect similar catalysts to the burgeoning skills debates as those that have been described in much detail in this chapter thus far. The need for students to be employable, the impact of globalisation and massification in higher education, the importance of technological skills in modern society and the demands made by governmental directives are among the reasons given for their addressing the issue of generic skills. It is, however, in the process that many adopted, that differences are noted.

Of note, firstly, is the reference made to an institutional decision to address generic skills. The University of South Australia, for example, has 'adopted as institutional policy a statement of seven graduate qualities as the outcomes it seeks for its

graduates' (Nunan, George & McCausland 2000:57), while the Curtin Business School, in 1998, adopted an 'integrated professional skills project' (De la Harpe, Radloff & Wyber 2000:235). Similarly, in 1994, the senior management team at the University of Luton which 'has always taken an overtly vocational focus to its academic provision', took a 'strategic decision to embed employability skills into each level of the undergraduate curriculum' (Steven & Fallows 1998:2). Thus, a clear message was sent out voicing institutional support.

At most of these institutions, what followed was the establishment of some form of working group tasked with reviewing the status quo with regard to generic skills development. While most institutions appeared to have broad consensus among academic staff regarding the desirability of developing such skills, the debate prompted by the working groups generally focused on practical implementation.

At the University of Luton this debate centred around two broad categories, namely the skills curriculum and the formal assessment of skills (Steven & Fallows 1998). The skills curriculum implied deciding on which skills ought to be highlighted within the various programmes, how these might be integrated meaningfully to enhance progression from one level to the next, and, finally, how to ensure that each student is fully exposed to all the different skills. The second issue focused specifically on questioning whether the generic skills should be assessed separately and how assessment should take place (Steven & Fallows 1998).

This structured process approach is found in the other studies. At Curtin Business School a task force was established to 'identify the generic skills relevant to business graduates and recommend teaching and assessment strategies' (De la Harpe, Radloff & Wyber 2000:235). This task force had broad representation across the business school and consulted regularly for several months. Once agreement had been reached, a newly formulated project team was tasked with managing the process of implementation which included involving staff by asking them to 'select from the skills those they considered most appropriate to their subject' (De la Harpe, Radloff & Wyber 2000:235), and changing their curricula to allow for integration. The need for a structure, strategy and process is seen to be equally important at a large 'traditional

university' where 'embedding key skills in the curriculum is a difficult exercise in planning and the management of change' (Chapple & Tolley 2000:67). At this institution, departments across the university were invited to participate in a pilot project and each departmental leader served as monitor to the process within her or his department. The departments selected were those that had performed well in previous teaching quality assessments and had, individually, already made some move towards integrating generic skills into their programmes (Chapple & Tolley 2000).

At other institutions, however, addressing generic skills was simply a part of a total recurriculation process. At Dublin City University a decision was made in 1993 to 'carry out an in-depth review of its [the programme's] structure and content' (Monks 1995:17), a move also prompted by internal changes, particularly in student needs, and external forces similar to those previously described. Part of the analysis that resulted from this review led to a realisation of the need for incorporating a range of skills that would enhance employability and these were then incorporated into the programme during the process of re-curriculation. This programme took a holistic view of skills development and was designed to 'develop the required knowledge and skills over three years' (Monks 1995:18).

As most of these case studies, apart from the case at Alverno College, describe recent initiatives, the impact of integrating generic learning outcomes into programmes of learning has yet to be effectively measured and assessed. The lessons learnt from Alverno (O'Brien 2000:38-45) remind of the importance of constant 'reflection on the abilities [that] keeps affecting the way the disciplines are conceptualised and taught' and the need for an enduring shared commitment to the process. Research into these matters will be ongoing for some time to come (5.4).

#### 2.4.3.2 Curricula

Integral to the process of embedding generic skills in programmes of learning is the curriculum which prescribes the eventual outcomes and directs teaching and learning practice. Once the process, as described above, of deciding on which generic skills are appropriate to a specific subject within a particular programme, had been completed, the actual design and writing up of the curricula provided the next challenge. A concern

that is raised in several of these studies is that any newly designed programme must still 'provide the appropriate mix of academic rigour and transferable skills' (Monks 1995:21). At Dublin City University, for example, their programme was structured to provide individual units that addressed certain generic skills on the one hand, while also addressing other generic skills within a subject-specific context. The student would, therefore, complete a unit in communication skills, while the ability to solve problems, think critically and analytically, and conduct research were built into subjects such as mathematics, economics and management which the working group found to be conducive to such development (Monks 1995).

At Curtin, on the other hand, each subject was addressed individually and a unit committee was responsible for deciding on the relevant skills and the extent to which they should be addressed within the subject. Thereafter tutor guides were developed that followed 'a standard format and [are] based on student-centred learning principles' (De la Harpe, Radloff & Wyber 2000:236). These guides supplied information relating to teaching materials and marking guides, as well as instructions on how to evaluate the success of the integration process. A template unit outline was made available to all staff online, and staff were encouraged 'to ensure that learning objectives, teaching and learning activities and assessment tasks were aligned' (De la Harpe & Radloff 2000:168). Thus explicit in the unit guide would be the learning objectives for each skill, a semester programme showing when the skill would be taught and assessed, 'marking guides showing assessment criteria and allocation of marks' for the skill and an icon for each skill used throughout the unit to highlight it, this all presupposing a similar approach to the content of the course itself (De la Harpe & Radloff 2000:168).

Alverno College, one of the few institutions worldwide to have long-term documented evidence of the practice of integrating generic skills into programmes of learning, has always regarded the curriculum as 'the central vehicle' for this process (O'Brien 2000:35). During the mid-seventies, the curricula at this American college were reorganised to 'make explicit what students are expected to learn, with the disciplines providing distinctive contexts for the development and demonstration of abilities' (O'Brien 2000:35). The curricula were informed by the importance of a particular 'ability' within a specific discipline as well as a need to develop abilities such as written and oral

communication as well as analytical skills across disciplines. This ensured commitment from all staff as the responsibility for developing the generic skills became a shared responsibility (O'Brien 2000:38). In addition, when a programme of study was being designed, care was taken to acknowledge the sequential nature of learning and thus a developmental structure which allowed for building the abilities from one level to the next was incorporated into the design (O'Brien 2000:29).

At the Edith Cowan University a different approach was used. Recognising how difficult it can be to teach generic skills through formal methods of instruction and acknowledging the importance of experiential learning in this regard, they opted for using online learning to meet this challenge. Thus they 'embraced a Web-supported problem-based learning environment' which they found enabled their undergraduate students to develop 'a raft of key skills though their interactions and activities in the Web-based course' (Oliver & McLoughlin 1999:5). This process includes weekly problem tasks being set for the students, in groups, within the context of the course, which are then marked online by tutors and returned to students who, in the meantime, are required to assess one another's work. This study reported a number of skills that were addressed in this way, including working as a team, critical thinking, collating information and, inevitably, problem-solving. The authors commented that no model answer is supplied to either the students or the tutors and it was found, therefore, that the process became the focus of the assessment rather than the actual final solution (Oliver & McLoughlin 1999:6). Such alternative approaches to developing generic learning outcomes provide a further opportunity for future research.

The important issue of assessment is raised in other studies, particularly given that 'skill development does not lend itself to forms of assessment with which university communities are always comfortable or familiar' and issues of validity, reliability and cost-effectiveness remain a problem (EISD 1999:17). The importance of assessment when developing generic skills is also addressed in the Alverno case study where the college faculty, in 1994, is cited defining assessment as a 'process integral to learning that involves observation, analysis, and judgement of each student's performance on the basis of explicit criteria, with resulting feedback to the student (in O'Brien 2000:39). This writer reminds that if learning is interactive, assessment must follow suit. Aspects

of assessment proved to be integral to this study and will be referred to repeatedly in subsequent chapters.

## 2.4.3.3 Staff development

The role of the academic staff in all that has been described thus far in this section cannot be underestimated. The extent to which staff are committed champions, compliant pawns or resistant instigators can have significant impact on the outcomes of the process. In each of the case studies reviewed, mention is made of the role played by the staff and the different ways in which attempts were made to ensure that all became active participants in the process. At Curtin, for example, the importance of providing support for the teaching staff was recognised right from the start of the project. The implication of changing curricula was that it became necessary to reconceptualise the role of the academic who had hitherto seen herself or himself as a subject specialist, but was now required to facilitate development in a far wider field. Thus, over and above the templates for drawing up the curricula, many other provisions were made for staff development including time-release arrangements, the development of teaching and learning resources, administrative support, seminars and so forth. Importantly, each department had one member of staff who was seconded to spend half of her/his work time on the project (De la Harpe & Radloff 2000:169).

At the University of Nottingham, the need for staff development was similarly acknowledged, and a series of seminars and workshops, designed specifically to encourage debate, was conducted (Chapple & Tolley 2000). Another institution that made use of a template to assist staff, was the University of Luton which also ran several 'training' events for those who would have to design and implement new curricula (Atlay & Harris 2000). These authors, however, express concern about the reception that the template and the process as a whole received, as this was not always positive. This was also the situation at Curtin, where staff found the process of integration to be time-consuming. In addition, they have found that 'many staff are still not convinced that part of their role is to teach skills and that they should spend time implementing the project' (De la Harpe, Radloff & Wyber 2000:238). Steven and Fallows (1998), also writing from Luton University, reiterate that staff development will

have to remain an on-going process for existing staff and that the skills initiative will be central to the induction of new staff if success is to be achieved.

#### 2.4.3.4 Reflection

Steven and Fallows (1998:7) suggest that 'many of the employability skills have always been a part of student life and have traditionally formed a hidden curriculum alongside the subject based materials'. In many instances the challenge is thus to make what was previously implicit, explicit, and to reveal that which in the past was concealed. Yet, apart from the impact on staff, care must be taken in terms of the student, or learner, to ensure that while awareness is raised, the balance is maintained. In addition, while most institutions took care to address staff needs, some note that as the process of integration unfolded, the need for additional student support services was highlighted as some students found themselves to be thrown out of kilter with what was now expected of them in the classroom (Nunan, George & McCausland 2000).

At Alverno, where generic skills have been part of their curricula for over twenty years, the process remains ongoing, carried by constant reflection on and research into both successes and failures. It is important to note that the results of their research and evaluation have been extremely positive (O'Brien 2000). At Curtin, the need to evaluate the outcomes of the integration process was seen to be critical and was written into the entire process from the start. Evaluation measures include student self-assessment, feedback from students and tutors via questionnaires and interviews, and regular reports from the different unit co-ordinators (De la Harpe, Radloff & Wyber 2000), and studies will continue as the first cohorts of students move through the new curricula. All the case studies, in one way or another however, echo the sentiments of Chapple and Tolley (2000:76) that while there is still much to learn, 'a foundation has been laid on which future developments can be built'. The extent of the impact that the generic learning outcomes have on student learning and the success as graduates will, however, have to be carefully assessed during the next few years.

#### 2.5 CONCLUSION

The extent of this chapter, within the context of this work as a whole, bears testimony to the intricacy of the subject at hand. The many different imperatives that have led to an emphasis on generic learning outcomes; the multitude of terms that have contributed to the skills debate; and the varied approaches adopted to the issue of integration all contribute to the complexity of this study. In the face of such overwhelming diversity of opinion and conflicting interpretation, the less intrepid higher practitioner might be forgiven for displaying ostrich-like oblivion or even disdain to the whole concept of generic learning outcomes and the implication of their integration in the higher education learning process. Even after such lengthy analysis, the way forward remains unclear. However, those who attempt to ignore the forces that have been described in this chapter and the momentum which they continue to gather, will, inevitably find themselves beached as the tidal wave of change passes them by. It might be necessary to rather focus on the commonalities that do exist in terms of those skills which are indeed, generic; transcend the terminology debate; and take up the challenge of redesigning curricula and redefining practice to ensure that SAQA's vision becomes reality.

Chapter Three follows with an account of the research process. It describes the approach and strategy followed, as well as the techniques used to generate the necessary data to provide for the critical analysis that is the central focus of this study.

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# **CHAPTER THREE**

# Research design

[T]he social researcher is faced with a variety of options and alternatives and has to make strategic decisions about which to choose ... Each choice brings with it a set of advantages and disadvantages ... The crucial thing for good research is that the choices are reasonable and that they are made explicit as part of any research report.

(Denscombe 1998:3)

#### 3.1 INTRODUCTION

The primary focus of this study was to analyse the incorporation of generic learning outcomes in a programme of learning, specifically within a technikon diploma, and the overall objective was to generate guidelines to assist practitioners when incorporating such outcomes in their courses. In Chapter Two a comprehensive review of the literature that deals with the issue of generic learning outcomes: what they are, why they are increasingly being deemed critical to any programme of learning and how they ought to be addressed, has been provided. In this subsequent chapter, the specific context of the research is described, including reflection on the approach employed, the strategy devised and the techniques utilised in generating the data. In addition, details of the research sample are supplied and the method employed during the analysis of the data explained. Finally, reference is made to the limitations of the study and problems experienced during the research.

#### 3.2 THE RESEARCH CONTEXT

In the literature review the issue of generic learning outcomes was addressed from both a national and international perspective within a broad higher education context. The focus of this study, however, was located within a particular sub-sector of higher education, the technikon sector, which is synonymous with offering 'career and technology education and training' (Cape Technikon 2002); providing a 'model of excellence in career-oriented education and training' (PE Technikon 2002) and 'quality career- and technology-oriented higher education' (Wits Technikon 2002). As was seen in Chapter Two, one of the main driving forces behind the growth of the generic skills movement was the need for graduates to enter the job market 'fit for purpose', thus not only equipped with subject-specific knowledge, but also competent in generic skills. The career-oriented approach followed by the technikons in South Africa, was

entrenched by the Minister of Education in his National Plan when he described them as 'institutions whose primary function is to provide career-oriented programmes at the diploma level' (DoE 2001:51-52), at least for the short to medium term. Whether this is indeed the most advantageous approach and what the implications are in the long term, is a matter for further debate, but there can be little doubt that the practical nature of a technikon education, including the required industry training period that is built into most diploma programmes, ought to present this sector as ideally positioned to take up the challenge of integrating generic learning outcomes that imply demonstrating skills competence.

Another key factor that was raised in Chapter Two as contributing to the demand for students to be equipped with generic skills, was the massification that has occurred in higher education. While the impact of this has been felt in all sub-sectors, it must be said that the technikon sector, which accepts students who do not have a matriculation exemption, carries the greater challenge in terms of addressing the needs of students whose schooling has, for whatever reason, left them under-prepared for further studies.

## 3.3 RESEARCH APPROACH AND STRATEGY

The need for this study to be practical in its eventual outcomes was of particular importance to the researcher. For this reason, a post-positivist interpretive approach was employed as the researcher sought to 'understand and interpret daily occurrences' (EASA 2001). The study endeavours to interpret and critique existing practice from the point of view of the higher education practitioner, in keeping with the notion that 'interpretive understanding is grounded in interactive, field-based inductive methodology, which in turn is embedded in practice and within a context' (Nduna 2000:67). Such an inductive methodology characterises the approach used in this study. Not only did the data generated of itself lead to 'categories of information' (Miles & Huberman 1994:7), but also, in some instances provided the platform for the next level of the investigation. Any interpretive form of research will, of necessity, be 'influenced subjectively by the values and purposes of the researcher' (Nduna 2000:67) and the researcher was keenly aware of this potential pitfall. For this reason the research, which centred on a case study, was designed to allow for the triangulation of the data, and to include a comparison with several other case studies as documented in

the literature review. The merits of using the case study for this type of research were addressed in Chapter One (1.4.2), with particular reference to its offering an opportunity for providing a holistic view of a particular situation within its natural setting. In this instance the setting was the Faculty of Management at the Cape Technikon.

#### 3.4 RESEARCH FOCUS

# 3.4.1 The National Diploma in Human Resources Management

The Faculty of Management is the Cape Technikon's largest faculty, offering a number of national diplomas as well as the B Tech, M Tech and, in 2001, its first D Tech degree. In this research the National Diploma in Human Resources Management was the focus of the case study with a particular emphasis placed on the second year of the programme. The selection of this diploma programme, in particular the second year, has been justified in the first chapter of this study. However, it is necessary to supply some additional background detail about the history of this programme at the Technikon as well as its composition.

Table 3.1: FTE student enrolments

	Total	Female	Male	Black	White	Coloured	Indian
Faculty of	2580	1680	900	979	766	784	51
Management							
Human Resources	573	419	154	229	72	253	19
Management Dip.							

Source: Cape Technikon: Department of Institutional Research and Planning 2002.

The Human Resources Management diploma has been offered by the Faculty since 1984 and currently has the highest number of student enrolments for a diploma in the Faculty. Table 3.1 indicates a breakdown of the enrolments, as well as some demographic details pertaining to the student body. The diploma is spread over three years of study, with the students required to complete a three-month, in-service training period during the third year. As can be seen from Table 3.2, students are required to not only complete discipline-specific subjects such as Personnel Management 1, 2 and 3, but also complete a number of generic subjects such as Communication and Enduser Computing. Such incorporation of generic subjects is common to most of the diplomas in the Faculty and will be seen to have particular relevance to this study.

Table 3.2: Programme structure for the National Diploma in Human Resources

Management.

1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year  Personnel Management III  Business Management III  Industrial Relations II		
Personnel Management I	Personnel Management II			
Business Management I	Business Management II*			
Management of Training I	Management of Training II			
Communication*	Statistical Methods	Labour Law		
End-user Computing*	Industrial Relations I	Three-month co-operative training experience		

<sup>\*</sup> Subjects assessed through continuous evaluation.

Also of importance is the fact that, as can seen from the table, certain subjects are assessed continuously with no final examination. These subjects require that the lecturer provide opportunities, other than the conventional end-of-year examination, for the student to be assessed. In addition, most subjects allow for both theory and practical classes that are officially part of the student's timetable. Thus it often happens that while students may sit in classes of over one hundred for 'theory' periods, they will also have opportunities to meet with the lecturer in smaller practical groups, usually about thirty per group. This format, however, differs from subject to subject with certain subjects only having practical allocations, such as the End-user computing classes, while others have the more common three 'theory' periods to two 'practical' periods split, a period lasting forty-five minutes.

#### 3.4.2 The academic staff

The Department of Human Resources comprises six full-time members of staff, with another seven staff who report to other departments, but who offer certain generic subjects to the Human Resources Management students. These include the staff responsible for End-user Computing, Communication in English, *Kommunikasie in Afrikaans*, Business Management I, II and III and Labour Law. For this research, the study guides of all the subjects offered during the three-year diploma were scrutinised with the exception of those for Business Management II and III. The reason for this latter omission was largely as a result of this subject's being the responsibility of the Department of Retail Business Management, which was in the throes of re-designing its structure according to the unit standards that have been registered by the Wholesale

and Retail SETA (Sector Education and Training Authority). At the time of analysis the documents were, therefore, unavailable.

Seven of these lecturers, five from the department and two of those responsible for generic subjects (Communication in English and Business Management I), were interviewed. As the lecturer responsible for Labour Law was on sabbatical at the time of the research, and the End-user Computing lecturer was a new appointment, these staff members were not included in the interview list. As Communication in English and Kommunikasie in Afrikaans mirror one another in terms of programme design and approach, the latter subject lecturer was similarly not included.

The interviewees comprised three women and four men. Among this group two have doctorates, two have a master's qualification, two are honours graduates and the seventh interviewee has a B Tech. Six of the seven have more than ten years' experience with the Cape Technikon, with the remaining interviewee having less than five years' lecturing experience.

# 3.4.3 The second-year students

The 2002 second-year student group consists of one hundred and fifteen full-time students and a specific breakdown of the demographics of this group is supplied in Table 3.3.

Table 3.3: FTE enrolments for second-year, full-time Human Resources Management students – 2002.

	Total	Female	Male	Black	White	Coloured	Indian
Human Resources Management	115	96	19	32	16	62	5

Source: Cape Technikon. Department of Institutional Research and Planning 2002.

#### 3.5 TECHNIQUES FOR GENERATING DATA

In keeping with the stated objective for the research as articulated in the title, namely that of a critical analysis, and within the framework of the case study approach that allows for multiple data generating techniques, the following were utilised in the research:

## 3.5.1 Document analysis

To set a platform for the interviews and survey that would follow, an in-depth document analysis of the study guides generated for each subject offered as part of the National Diploma in Human Resources Management was conducted.

For each national diploma currently on offer at any of the country's technikons, there is a convenor institution. This convenor institution is responsible, after consultation with colleagues and with industry, for setting the curriculum for the particular diploma. Thus, while the individual lecturer has a fair amount of latitude when designing her or his subject curriculum, such design must occur within the broad framework as defined by the convenor technikon. Each lecturer within the diploma is then required to compile a study guide that is given to the students at the start of the academic year, to orient them in terms of the subject. In 2000, the academic staff at the Faculty of Management were given guidelines to assist them in designing their curricula, and therefore their study guides, according to an outcomes-based approach and in keeping with SAQA requirements. This implied not only presenting a programme of learning according to OBE, as well as describing the relevant specific outcomes and assessment critieria, but also including reference to issues such as RPL and critical outcomes. Such redesigned guides were to be made available by 2001.

The 2002 study guides that had been prepared for the second-year subjects offered in the Human Resources Management diploma formed the main focus of the review that took place during February of this same year. The guides were analysed according to three key questions that have been described earlier in this thesis, namely whether:

- the critical cross-field outcomes had been articulated as clear outcomes in the study guide;
- the study guide reflected the teaching method to be employed in developing the skills;
- the method for assessing the skills had been stated.

The data generated in this way was analysed and the findings guided the researcher in compiling the interview schedules for the semi-structured interviews that followed.

#### 3.5.2 Interviews

The role of the interview is critical when wishing to obtain personal insights from those involved in a particular situation. Knowles (quoted in Sheal 1992:53) agrees, suggesting that '[b]etter than any other device, they help to understand how people feel and why . . .'. Two interviewing techniques were utilised in this study, namely the semi-structured interview, which was used to obtain insights from the selected members of the academic staff involved in the diploma, as well as focus groups, which were conducted with second-year students on the programme.

#### 3.5.2.1 Semi-structured interviews

The researcher believed that the detailed information that is usually obtained from conducting one-to-one interviews would not only satisfy the need for data 'based on emotions, experiences and feelings' (Denscombe 1998:111), but would also serve to validate the data that was to be obtained via other techniques. Given that the eventual aim of the research was to supply guidelines to academic staff, it was particularly pertinent that these same staff be afforded an opportunity to explain where they saw themselves in terms of the process of fulfilling the SAQA mandate for critical outcome incorporation. In preparing for the interviews the researcher took heed of the caution articulated by Denscombe (1998:109) not to view such preparation too casually, and care was taken to ensure a systematic approach.

As mentioned earlier, seven members of the academic staff involved in the Human Resources Management diploma programme participated in the study. They were interviewed, by prior appointment, during the first week in March 2002. The interviews, which took place in the staff member's own office, lasted between 35 minutes to an hour. Although some researchers recommend that such interviews be 'up to two to three hours so that the subject comes to feel at ease . . .' (Bouma & Atkinson 1995:215), the existing relationship between the interviewer and interviewee, as well as the respondents' participation in earlier research of this author, ensured that the subject at hand could be addressed immediately. In one instance, two staff members who share an office and who are also husband and wife, were interviewed simultaneously. The interview schedule, Appendix A, was used mainly as a guideline for the discussion, allowing a flexibility that is characteristic of the semi-structured approach (Denscombe 1998:113). In addition, the analysis of the study guides was completed prior to the

interviews thus giving the interviewer an opportunity to address specific issues raised during this earlier analysis. The interviews were taped, and subsequently transcribed by the interviewer. An example of one of the transcriptions is included as Appendix B.

Apart from fulfilling the above-mentioned objectives, the interviews also served to heighten staff awareness, a spin-off that has been reflected in similar research (Fallows & Steven 2001), and thus contributed to further debate in the Faculty, an issue that will be addressed again in a later chapter.

## 3.5.2.2 Focus groups

Three focus groups were conducted. The objective of the focus groups was to determine the extent to which the objectives as set out in writing in the study guides and the lecturer's expectations in terms of how these were being practically implemented, married with the students' perceptions. Students were selected randomly from the second-year Human Resources group, based on their availability in terms of their class timetables. Each participant received a personally addressed letter inviting her or him to join the group in one of the library seminar rooms. Although groups of between six to eight students had been originally envisaged, the interviewer invited ten per group, on the assumption that some students would not arrive. However, with the exception of one formal apology, all invited students arrived for the sessions with an additional student from the group arriving unsolicited. This resulted in groups of nine, ten and eleven students respectively.

The focus groups, which took place on Wednesday, 20 March 2002 in one of the library seminar rooms, lasted for approximately one hour each, and the proceedings, which were guided by an interview schedule (Appendix C), were recorded. The students were all known to the interviewer and appeared to participate openly and with enthusiasm. An example taken from one of the transcripts is included as Appendix D. Given the lively, exuberant nature of the students present, the interviewer took care to ensure correct interpretation by slowing down the discussion at times by repeating several comments made, and then asking for confirmation in respect of correct interpretation. A considerable amount of data was generated in this way enhancing the potential for meaningful analysis later.

#### 3.5.3 Questionnaires

Subsequent to the completion of the interviews and focus groups as well as the transcription and initial analysis, a questionnaire (Appendix E) was designed. The objective in using the questionnaire was not only to validate the data gathered thus far, but also to address certain gaps that were perceived during the initial analysis and to follow up on issues that had been raised by the students during the focus groups.

The choice of the questionnaire to elicit student responses regarding the incorporation of generic learning outcomes in a study programme has been adopted previously by other researchers, with some success. Examples include the work of Laughton and Montanheiro (1996); Leckey and McGuigan (1997); as well as in a study conducted by Education and Professional Development (EISD)(1999) in the UK. In each instance, the objective was to determine student, or student and staff, perceptions relating to some aspect of generic learning outcomes.

A key criterion for questionnaire design is that 'each question must have some intended bearing on one of the variables [one is] studying' (Bouma & Atkinson 1995:81). For this reason the questionnaire reflects the key areas that had proved to be prominent during the initial analysis. Among these key areas are: recognition by the student of the importance of developing generic skills; and teaching and learning approaches, both in terms of classroom activity and assessment, that the students perceived to be beneficial to the development of the generic skills.

The questionnaire was piloted by two of the lecturers in the Department of Human Resources department and, as there proved to be no pitfalls in the process, given to the full-time, second-year group of Human Resources Management students on 30 April 2002. It took the 61 students who attended class on that day about 20 minutes to complete the questionnaire.

#### 3.6 DATA ANALYSIS

As discussed in Chapter One, the analysis of the data for this study covered three distinct phases, both during and after the data collection period, with 'earlier analysis informing later data collection (Blaxter, Hughes & Tight 1996:173). The information

gleaned from the study guides was categorised according to the three questions that had been posed. This review then laid a platform for the semi-structured interviews and the focus groups. Once these qualitative interviews had been transcribed, the raw data was referenced and grouped under key headings based on the responses received. Thus a process of data reduction was applied allowing for the 'selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes or transcriptions' (Miles & Huberman 1994:10). Thus a process of 'reduction and interpretation' (Marshall & Rossman quoted in Creswell 1994:154) was followed to eventually bring about categories of information. Creswell (1994:154) suggests that these categories 'form the basis for the emerging story to be told by the qualitative researcher'.

While the researcher was led by the data in determining the reference groupings when a particular issue proved to be a recurrent theme, the foundation provided during the literature review also provided guidance in this exercise. Furthermore, Miles and Huberman (1994:10) remind that 'even before the data are actually collected, anticipatory data reduction is occurring'. This process is most often at a subconscious level, but contributes to the decision-making process of the researcher throughout the investigation.

On completion of the survey, which was informed by the findings of the earlier fieldwork, the data was collated and, particularly in the case of questions four, five and six, cross-referenced with the responses obtained during the focus group interviews. This then provided the basis for drawing up a broad outline of what was perceived both on the part of the students and the academic staff, as being most effective and beneficial in terms of process when implementing the generic learning outcomes into the study programmes.

Finally, the findings were compared and contrasted with the literature. As the majority of the data collected for this research project was qualitative in nature, the process of ordering, coding and analysing the responses received was particularly time-consuming, but provided valuable insight for the study as a whole.

#### 3.7 ASPECTS OF VALIDITY AND RELIABILITY

Although several oblique references have been made thus far in the study to aspects of validity and reliability in the research process, it is necessary to briefly address these issues more overtly. Denscombe (1998) speaks of the need to justify the methods used and conclusions drawn by the researcher, but such verification is not always simple for the qualitative researcher and there is considerable debate concerning an appropriate approach to aspects of validity and reliability (Cresswell 1994).

Key to any research are the issues of objectivity, reliability and validity (Denscombe 1998) however, and this is of particular significance when conducting the analysis of qualitative data as is predominantly the case in this study. It is necessary for the researcher to take a neutral stand towards the data generated and reproduce it as it presents itself, untainted, as far as possible, by the researcher's own bias (Blaxter, Hughes & Tight 1996). To this end, the researcher has throughout the process of analysis endeavoured to reflect on the extent of her impact on the research, using as benchmark the consideration of whether or not another researcher would have obtained the same results.

Nevertheless, Denscombe (1998) offers some insights and guidelines in relation to these two key concepts and this study can be assessed in the light of his suggested criteria. From the first chapter of this thesis, the relationship of the researcher with those who participated in the research, has been openly acknowledged and care was taken to avoid 'biased and one-sided reporting' (Denscombe 1998:213). The use of multiple data-collection methods, document analysis, interviews, focus groups as well as the survey, allowed for corroboration and complemented the critical review of the findings as will be seen in the reporting in Chapter Four. This use of multiple methods provides one of the strongest arguments for the validity of the findings and, in addition, allowed for triangulation where corresponding points of view that were highlighted from the different sets of data allowed for 'locating a true position' (Denscombe 1998:85) regarding the problem being addressed.

Another aspect that contributes to ensuring validity is related to the extent to which research findings 'were fed back to informants to get their opinion on the explanation being proposed' (Denscombe 1998:214). The researcher was able to conduct such a feedback session with the academic staff interviewed during a report back and there was consensus as to the findings as well as the conclusions drawn. Cresswell (1994:104) suggests that often the question of validity refers to 'the appropriateness of the measuring device'. This issue has been addressed in some detail in the preceding paragraphs of this chapter.

Reliability, on the other hand is most appropriately explained when asking whether or not another researcher would 'have got the same results and arrived at the same conclusions?' (Denscombe 1998:213). While this remains a difficult question to answer or verify, the researcher has provided, as mentioned in the previous paragraph, a detailed account of the aims of the research – both in this chapter as well as in Chapter One; a clear description of the research process as well as 'the reasoning behind key decisions made' (author's italics) (Denscombe 1998:213) in the hope that such definition and detail might alleviate concerns regarding reliability in this study.

#### 3.8 LIMITATIONS OF THE STUDY

Although considerable care was taken during the conducting of the research, both in the planning and the execution, the specific focus of the study will, inevitably, hamper the broader application of the guidelines that result from it. The nature of the case study is such that it is 'bounded by time and activity' (Creswell 1994:12), and a different context might produce alternative results. This limitation is also highlighted by other researchers such as Atlay and Harris (2000:76) who, when describing how the University of Luton addressed the issue of developing 'students' wider attributes and skills to improve graduate 'employability' suggest that 'caution needs to be applied when extrapolating the experience of one institution to that of another'. Even though a relatively large number of similar studies were discussed in the literature review, the limitations of the case study approach remain true.

Another aspect of the study that proved problematic was in the transcribing of the focus groups. In view of the number that participated and the tendency among participants to interrupt one another or speak at the same time, certain sections of the tapes were unclear. In addition, one of the members in the focus group was a French-speaking student from central Africa, and it was particularly difficult to pick up what he had said.

Nevertheless, the transcriptions were completed fairly soon after the focus groups had taken place and, in several instances, the researcher was able to get the gist of what had been said with the help of personal recollection.

Another aspect that may have further contributed to the depth of the analysis, might have been the review of some of the term test and examination papers that were set for the different subjects that formed part of the focus of the study. As will be seen in the analysis in Chapter Four, the students made several references to the role of tests and examinations during the focus group interviews. Their perceptions, however, were not, referenced to the actual product itself.

Finally, the inexperience of the researcher in conducting a study of this nature, particularly in the design of the research instruments, must be acknowledged. In addition, the fact that the researcher completed the transcription of both the semi-structured interviews as well as the focus groups herself, given her inexperience, is a further shortcoming of the study. Furthermore, the researcher's link with the department that was used in the study, given that those interviewed were colleagues and many of the students were known to her, must be noted, especially in the light of the often subjective nature of social research. Nevertheless, and ever mindful of Denscombe's (1998) comments quoted at the start of this chapter which highlight the choices that are to be made when conducting research, the researcher has attempted to remain true to the notion that 'research is a discipline' requiring that one ask 'the right questions, remain accurate and honest; maintain careful records and accept limitations' (Bouma & Atkinson 1995:13-19).

#### 3.9 CONCLUSION

This chapter has essentially provided what Lincoln and Guba (quoted in Denscombe 1998:213) refer to as an 'audit trail'. Thus the chapter describes the approach and strategy employed, the focus of the research, as well as the samples used in both the interviews and the survey. Account has been given of the various techniques for generating data and their choice has been justified. Finally, the process for data analysis has been explained and the limitations of the study have been highlighted. In

Chapter Four a detailed description of the findings that resulted from this research will be presented.

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## **CHAPTER FOUR**

# Findings of the empirical study

Qualitative data . . . are usually complex, ambiguous and sometimes downright contradictory. Doing qualitative analysis means living for as long as possible with that complexity and ambiguity, coming to terms with it, and passing on your conclusions to the reader in a form that clarifies and deepens understanding.

(Miles & Huberman 1994:309)

## 4.1 INTRODUCTION

Patton (in Creswell 1994:153) has noted that 'data collected by qualitative methods are voluminous' and that it is difficult to prepare students for 'the sheer massive volumes of information with which they will find themselves confronted when data collection has ended'. For this reason a systematic approach to analysis is important and guidelines for doing so are often found in the literature. However, some researchers caution that there can be few hard and fast rules when conducting an analysis of qualitative data. Glaser and Strauss (quoted in Denscombe 1998:214-215), whose widely-recognised grounded theory was 'built upon a long tradition of qualitative research', are mindful of a rigid approach that would restrict the endeavours of the social researcher, and state that their approach offers 'guidelines and rules of thumb, not rules'.

The approach utilised in this study has been documented in the previous chapter, particularly the extent to which the process of analysis took place both concurrent to the data collection as well as subsequent to its completion. In this chapter, the results of the fieldwork that was done over a period of four months, will be reflected and summarized to provide insight into the main patterns and trends that presented themselves during the research.

#### 4.2 FINDINGS

The reporting in this section follows chronologically, addressing each of the activities used for generating data individually, but showing how the different trends and patterns formed as the research progressed. Each of these data generating techniques have been discussed in Chapter Three (3.5).

## 4.2.1 Study guides

Twelve subject study guides from the National Diploma in Human Resources Management programme were analysed. These included the five first-year courses, four from the second year and three from the third year. The guides all appeared to be neatly set out and written in clear, simple language with most of them being printed on coloured paper and, in some instances, incorporating innovative word-processing techniques, thus contributing to a student-friendly product. All the guides showed some indication of the move to outcomes-based education according to SAQA requirements, with ten of the twelve making reference to a 'purpose statement' and the relevant specified outcomes for the course. It was, however, clear from careful reading that in several instances the terminology used was not always being interpreted in accordance with the definitions supplied by SAQA. So, for example, 'specified outcomes and assessment criteria' were listed under a single heading, implying that these were interchangeable concepts. This lack of clarity was acknowledged by all of the staff during the subsequent interviews and will be referred to again later (4.2.2).

The specific analysis of the study guides according to the three questions posed (3.5.1), provided the following information:

# Have the critical cross-field outcomes been articulated as clear outcomes in the study guide?

Four of the twelve guides make no overt reference to the critical cross-field outcomes. One of these four is the guide for the End-user Computing course that focuses specifically on developing technological skills, thus part of one of the critical outcomes. Of the remaining eight, two guides list subject specific outcomes under the heading 'critical outcomes'. When asked about this in the interview, the lecturer responsible for both guides explained that these were outcomes that they deemed 'critical' to the subject, emphasising the confusion that exists regarding terminology. The remaining study guides all refer to a number of the critical outcomes. In most instances only some of the outcomes have been selected and taken up in the study guides in the exact format as that in which they are found in the SAQA documentation. In most cases the critical outcomes are grouped together in the study guides in a section that precedes the content-specific information, thus showing no sign of integration.

# Does the study guide reflect the teaching method to be employed in developing the skill?

All of the guides refer to a variety of classroom techniques and other teaching and learning methods that are used in addition to the formal lecturing approach. These include case studies, question and answer sessions, discussions, debates, practicals, individual and group presentations, role-play, group work activities, videos, industry visits and so forth. It should be noted that this variety in approach was, in many instances, ratified in the responses received from the students themselves during the focus group sessions (4.2.3.1).

Apart from Communication in English and Management of Training I and II, none of the study guides specifically mentions the critical outcomes as the focus, or even part focus of a particular learning activity, although it is implicit in many of the different modules. So, for example, the need to solve problems is implied in both completing a Statistics exercise that requires calculations, as well as in the case study that presents a group with a particular problem to be solved; presenting one's work to the entire class enhances communication skills; and so forth. One can continue in this way with any number of examples where the method used in the classroom is, of itself, utilising the generic skill.

The two courses mentioned in the previous paragraph as exceptions, are such largely because of the subject content that comprises certain of the critical outcomes. Management of Training I and II, for example, have a module devoted to communications skill, dealing with diversity and learning opportunities, while Communication in English covers a large number of the critical outcomes within the discipline itself including presentation skills; using appropriate technology; group work skills; cultural sensitivity; collecting, analysing and critically evaluating information; and other aspects of written and oral communication.

Of note is the fact that in certain instances the essence of some of the critical outcomes is reflected in the study guides as part of orienting the student to the subject. So, for example, the need for self-management and time management is addressed; the idea

of learning as a 'collective effort' is mentioned; and the 'mastery of problem solving skills' is articulated.

## Has a method for assessing the skills been stated?

The role of assessment in learning has been well documented in the literature and is a discussion that falls outside the parameters of this study. Of relevance, however, is the caveat issued by Biggs (1999:66), that while teachers have 'an ordered view of the educational process' that ends with designing the assessment tool, the student sees this same process in reverse. Thus their focus is on the assessment and they generally adapt their learning accordingly. The key, therefore, is that the assessment correlates with the desired outcome, in this case being the critical outcomes, and focusing on this aspect during the review of the study guides highlighted the following three key issues.

Firstly, only three of the study guides had articulated clear links between their specified outcomes, the assessment criteria and the assessment tool or tools to be used. This, however, referred only to the subject-specific outcomes and not the critical outcomes. An exception was the Communication in English course, given that, as mentioned earlier, the course content mirrors that of the SAQA list of critical outcomes.

A second feature was the fact that in two instances a 'lecturer's discretionary mark' which is compiled from marks awarded for communication skills, sound human relations, logical reasoning, organisational skills, integrity and positive attitude was mentioned. While the list duplicates many of the critical outcomes, no criteria for such allocation were given and the assessment was, therefore, based solely on the lecturer's own perception. Finally, several of the study guides also reflected an innovative and diverse approach in the assessment tools used, such as portfolios, presentations, research projects, practical assignments, case studies, etc., beyond the conventional tests and examinations. However, the weight carried by these 'alternative' assessments in most cases contributed less than 15% to the student's final mark. Clear exceptions to this rule are the subjects assessed though continuous evaluation. In Communication in English, for example, 70% of the student's final mark comprised practical assignments, research tasks, portfolios, and the like.

The review of the study guides clearly indicated the absence of the critical outcomes in the curricula envisaged for the various subjects in the programme, apart from the two generic subjects already mentioned. The lack of integration and, in some instances misrepresentation, emphasised the need for further staff development in curriculum design, particularly with regard to generic learning outcomes or critical outcomes. This need was, as will be seen, later acknowledged during the interviews by the academic staff themselves.

#### 4.2.2 Semi-structured interviews

The semi-structured interviews provided considerable insight into the perceptions of the academic staff regarding their understanding of and responsibility towards developing generic learning outcomes. Their responses have been clustered around the five predominant topics to emerge during the interviews, including issues of clarity; approaches to teaching and learning; the changing student profile; a holistic approach; and assessment issues. Finally, in this section, certain additional insights gleaned from the data will be highlighted.

# 4.2.2.1 Issues of clarity

Much of what was noted as a result of the analysis of the study guides was confirmed and elaborated on during the interviews with the lecturers. For example, all of those interviewed acknowledged a sketchy understanding of what exactly was expected of them when re-designing their study guides or curricula to meet the demands of an outcomes-based system and, in most instances, a limited prior knowledge of the critical outcomes. One respondent stated 'at some stage we did get an obscure message relating to these issues, but I still don't know what are specified outcomes and all those sort of things'. Even though some of the lecturers had actually included an almost complete list of the critical outcomes, they acknowledged that they were, in actual fact, unfamiliar with the list and had not actively considered their practical incorporation into the study programmes, stating that their inclusion was 'purely incidental'.

# 4.2.2.2 Approaches to teaching and learning

In spite of this apparent lack of clear direction, all those interviewed claimed that their subjects allowed for the development of most of the critical outcomes as natural by-

products of the teaching and learning methods employed in the classroom. Some of the lecturers explained that although they had perhaps not been using the correct terminology, they had always had a practical approach in the classroom that would contribute to the development of many of the critical outcomes, suggesting that the new terminology was simply 'another way of saying what we have always been doing'. In addition, while all of those interviewed acknowledged having made certain changes to the written format of their study guides in response to SAQA demands, most felt that this had not specifically changed the way they went about their teaching. All of the staff interviewed claimed to be making use of a variety of teaching and learning approaches, including case studies, role play, practical classes, presentations, group assignments and so forth, and stated that they had been doing so for some time. These claims were later borne out by both the student focus groups (4.2.3.3) as well as in the survey, where only 21.3% of the respondents believed that they spent more time listening to a lecture than actively discussing the work (Table 4.3).

Furthermore, most of the academic staff interviewed felt that the research projects that they required the students to complete in groups during the year, gave the students the opportunity to develop several of the critical outcomes stating that they 'actually complete a project that requires them to work in groups and to conduct research'. The outcomes mentioned specifically by the respondents included communication skills (most included a written component as well as a class presentation), team working skills, critical thinking and problem solving skills, time management, working in culturally diverse settings within the groups, and so forth. Again, this was borne out in both the focus groups (4.2.3.1) and in the survey (4.2.4) in which, on several occasions, the students cited one or more of their group projects as having offered them such opportunities.

# 4.2.2.3 Changing student profile

Four of the staff members who had been at the Technikon for more than ten years, did acknowledge that their classroom technique had changed since their early days in the profession, but felt that this had been in response to the changed nature of the student body, rather than as a result of any directives, SAQA or otherwise. One lecturer, for example, stated 'I did not change it [the study guide] to please them [SAQA]' and

continued by explaining 'my approach in class has changed considerably as well. In the past I provided considerable detail, but now I simply provide a framework and the students have to go and research to fill in the gaps'.

Most of the interviewees referred to the change in the student corps, stating that the current student intake includes many more students in need of academic assistance than was the case in the past. Many of the interviewees also made reference to the poor language skills of the students, and of particular concern were the comments of the Communication in English lecturer. This member of staff, in spite of employing a large number of innovative teaching and assessment methods, and not being tied to an end of year examination, expressed intense frustration with regard to language competency. She said that 'communication skills will remain underdeveloped if basic language skills are lacking and I don't know whether these students are capable of meeting the challenge of critical thinking and problem-solving at a post-school level'. Another interviewee expressed similar concerns stating 'at the moment I do not even know whether the students sitting in front of me even understand English. Some students do not even know why they are doing HR!'.

The English lecturer also expressed doubt concerning the feasibility of addressing the comprehensive range of critical outcomes, while at the same time acknowledging that of all the subjects that comprised the diploma programme, Communication in English probably offered the most obvious home for many from the list. She further hastened to add, however, that 'English communication cannot be seen as the balm to all ills' and that it had to be addressed by all concerned.

## 4.2.2.4 A holistic approach

All of the interviewees felt that the development of generic skills among their students was part of their responsibility as an educator. One interviewee stated 'even if it isn't my task, I do think it is my responsibility'. In another instance the lecturer emphasised how important it is that the student is able to 'stand up in front of a group of people and make himself heard'. However, this same lecturer acknowledged that such presentation skills were beyond his own field of expertise and that he was not always sure how to advise the student who demonstrated ineptitude in this area, saying '[w]e try to

encourage these skills in the classroom, but I don't have the knowledge to assist students with, for example, communication skills – this is not my field'.

Similarly, other interviewees claimed that it would be easier for them to address the critical outcomes when the nature of the discipline lent itself to the various skills. Here, for example, entrepreneurial skills are addressed as a full module in the Business Management I course, while this is also true for subjects like End-user Computing, Communication in English, Management of Training and even Statistics, with its focus on problem-solving. As one respondent explained, 'fortunately the nature of my subject lends itself to some of the critical outcomes such as speaking in public, etc.'. Even the lecturer who felt lacking in the public presentation domain, placed considerable emphasis on critical analysis in the project that his students were required to complete, thus making a contribution to developing the student as a whole. The notion of interdisciplinary support was articulated by other interviewees who also explained how, within the department, 'we often work with other lecturers on certain projects and assignments'. Thus the Communication in English report writing task would be based on one of the themes addressed in Personnel Management; Management of Training would expect the students to integrate the media presentation skills acquired during their End-user Computing classes into their training courses, and so on.

Another issue that was raised by some of the staff was that of year-on-year development. One lecturer, who sees the students in both the first and the second year, explained that she had incorporated three of the critical outcomes in the first year of her course and followed on in the second with three others. Another lecturer explained that the emphasis placed on the analytical and critical thinking abilities of the students grew in importance from the first year through to the third year. According to this member of staff, the assessment was then adapted accordingly so that by the time the student had completed the three diploma years, she or he would not only be ready to enter industry, but also have the necessary grounding to continue with post-graduate studies should that be the desire. This interviewee stated '[a] programme must be seen as a unit and assessed in terms of what it achieves over the full three year period'.

#### 4.2.2.5 Assessment issues

Several issues relating to assessment were raised. The youngest interviewee, who had fairly recently completed his own technikon studies, proved to be particularly positive in terms of the potential for developing a student's generic skills. He cited numerous examples of how use is made of case studies, role play, research exercises, question and answer (Q & A) sessions and other classroom discussions in his course.

'The first-year students receive a group project that requires them to go out into industry to do an analysis of the XX situation in a company. They have to manage their own time, they can choose their own groups and identify an organisation of their own choice. They then have to make a critical analysis of whether or not the company is adhering to legislated requirements, etc., and finally they are given the opportunity to offer recommendations. The students are, therefore, actually assessed based on the extent to which they demonstrate their ability to think critically.'

Not only was his enthusiasm catching, but his comments were validated by the responses that were later received from his students during the focus groups (4.2.3.1). He also raised the issue of assessment, stating that it would be far more meaningful if the formal test system could be replaced or at least changed to allow research projects to comprise a larger proportion of the final mark. Other staff, specifically one lecturer who claimed that he had been trying to change the stipulated assessment regimen for several years, echoed this desire.

The notion of linking the critical outcomes to a specific assessment instrument was not raised by any of the interviewees, with the exception of those courses that were mentioned earlier as having some of the critical outcomes as the course's own specific outcomes. The focus thus remains on the ability of the student to generate marks during formal term tests and end-of-year examinations.

#### 4.2.2.6 Additional insights

Only one of the interviewees showed a clear content specific bias. Although several attempts were made during the interview to return to the issue of the critical outcomes, this after the interviewee had been given a list of the outcomes and time to read them, the responses indicated a lack of understanding of the concept of generic skills. So, for example, when asked whether students are given an opportunity to develop the critical

outcomes during class the response was 'the students receive the majority of things that they need for the business plan as test questions during the year'. This academic staff member felt that enough time had been spent on redesigning the curricula of late, and stated that we 'must beware of making too many different changes simply because we are being forced into it'.

With this one exception, however, all the staff felt that they would welcome further opportunities to discuss the integration of the critical outcomes and receive additional information relating to ways in which they could be addressed. All these lecturers felt that as a result of the interview they had already become more aware of the potential for developing generic skills among their students and would, with this new awareness, see if these could be more effectively incorporated into their courses. Inevitably, however, concerns regarding time and the need to still prepare students for an examination, were raised. So, for example, one interviewee stated: 'I think what they [SAQA] are trying to do is good, but I do not think it is realistic. I have to concentrate on whether they understand my content as some of them are very weak, and to link everything up to critical outcomes is very difficult.' In addition, certain staff expressed their frustration in terms of a lack of time to implement innovative techniques, and lack of clear managerial support.

A positive aspect of all of the interviews, apart from one, was the response that all concerned felt that being part of the research process had heightened their awareness regarding the critical outcomes, and in several instances they acknowledged that they would, in the future, pay greater attention to their incorporation into their programmes of learning. Comments included '[n]ow that I am more aware, I will try to build them into my course'; 'I will bring in more diversity talks, exercises for improving writing skills and more opportunities for shorter presentations'; and 'I will definitely include them more effectively in my course'.

From the responses generated by the interviews, five key issues emerged:

> That any attempt at redesigning courses to meet the requirements of SAQA, particularly with reference to the critical outcomes, should be addressed in an

- organised and structured way with managerial backing and clear indicators given.
- That much of what was occurring naturally in the classroom lent itself to the development of generic skills.
- ➤ That staff development needs with regard to integrating generic learning outcomes or, specifically the critical outcomes, should be urgently addressed, particularly with regard to assessment practice.
- > That the diploma programme should be addressed as a whole and that decisions regarding integrating generic skills might best be served by using a holistic programmatic approach.
- ➤ That time and resources be allocated during both the planning and implementation phase to facilitate meaningful, considered and informed practice when integrating the critical outcomes into programmes of learning.

## 4.2.3 Focus groups

Three focus groups were conducted using second-year students from the Human Resources Management Diploma programme. The details of the groups, venue, process, size, etc. have all been provided in Chapter Three (3.5.2.2). The following, however, provides a summary of the most salient findings from the various groups. To facilitate analysis and clear interpretation, the findings have been grouped under four key headings which emerged from the data generated during the focus group sessions.

# 4.2.3.1 Integrating the generic skills

All of the groups attested to the importance of developing generic skills and appeared to be well-versed in terms of what these should be for a future human resources manager, responses that were confirmed in the survey (4.2.4). The students also felt that the importance of the generic skills was ascribed to by most of their lecturers, although one student's response to being asked what they might recommend to improve the development of critical outcomes was 'giv[ing] them a copy of this list of skills [SAQA's critical outcomes] would probably be a place to start'.

As the groups were taken through the list of outcomes, the general consensus was that, although they had never specifically been informed of these as being the focus or even

part-focus of a particular module, they believed that the skills had all been addressed in one or more of their subjects. They immediately referred to subjects such as Communication in English and End-User Computing as having had a direct impact on the relevant critical outcome and generally felt that these subjects had had considerable impact on their first-year studies. So, for example, they mentioned the number of assignments that they had to complete in groups and felt that the grounding given during their first year had enabled them to be more effective when required to complete group work in their second year, especially in dealing with conflict and encouraging and supporting one another. Comments included 'that's fine because we are comfortable in the groups we are working in . . . we can rely on one another'; 'if we have someone in the group who is not doing what they are supposed to do it is better to encourage them than to just take away marks' and 'working in groups because most of our practical work is done in groups'. Some participants did, however, have reservations regarding the efficacy of group work, preferring to work on their own.

## 4.2.3.2 The programme as a whole

Each of the three focus groups confirmed that they were continually being encouraged to see how their subjects linked to one another and appeared to have no problem in transferring, for example, the communication skills developed in their Communication in English classes to perhaps their Management of Training end-of-year presentations. A Business Management project that included some letter and report writing that had also been addressed during their Communication classes. These responses pose an interesting dilemma for those researchers who question the transferability of generic skills.

#### 4.2.3.3 Teaching methods

It was clear that the students generally felt comfortable with the approaches used in the classroom and they made numerous references to the interactive nature that characterised such sessions. Specific reference was made to the use of role play, case studies, impromptu presentations, group sessions and problem-solving activities that took place in the subjects. It was of interest to note that in some instances these activities were initiated during the so-called 'theory' periods with over one hundred students in the class. When asked about how this was carried out, students explained that several tutors were brought into the classroom to assist the lecturer in facilitating,

for example, the group work or role play. These second-year students cited only one course that currently ran strictly along traditional 'talk and chalk' lines, stating that 'the worst is when there's no interaction and the lecturer just talks at us'.

From the responses received it became clear that in most instances the students were offered many opportunities to utilise generic skills, but when asked whether they were given any specific guidance on how to develop the skills, thus enhancing their current standing, the reactions were mixed. So, for example, some students felt that with group work you 'learn by your mistakes' and 'learn as you go along'. Here the importance of peer learning was emphasised with many students attesting to how they had learned from one another during group work. While the impact of the generic first year subjects of Communication in English and End-user Computing has already been mentioned, students acknowledged that, for example, the processes involved in problem-solving had not necessarily been 'taught'.

### 4.2.3.4 The role of assessment

The students felt that factors such as their critical thinking skills and problem-solving abilities were addressed in many of the assignments that they completed, this again concurring with the claims made by certain staff during the interviews (4.2.2.2). However, as acknowledged by the staff, the students mentioned no instances where they felt that a generic skill, or specifically one of the critical outcomes, was actually being assessed, this apart from the two generic first-year courses already mentioned. At no stage during any of the focus groups did the respondents mention either an examination or a term test as an example of when a particular generic skill or critical outcome could be displayed or used, this in spite of the fact that some mentioned the use of case studies during examinations and questions that required them to apply theory. On the contrary, it was clear from the discussions that the mindset of the students remained focused on the need to complete an examination to pass the subject, thus viewed solely as a means to an end.

Comments made about the exams or term tests included statements like 'exams were a disappointment. Having studied so hard, they were too easy'; 'pure regurgitation'; 'it's not fair if a lecturer picks up that a class is not coping with something to simply not test

it'; 'I didn't really understand and yet I passed with a good mark'; 'some lecturers tell us everything that is coming in the exam, but I am not complaining because we still get good marks'. However, when asked whether they might prefer exams or tests that encouraged critical thinking, a response from one group was 'it is also disappointing if you study so hard and then no theory is asked'. Another group had similar concerns about some of the examinations requiring pure regurgitation stating that if the lecturer 'does not find the key words you know you won't do well'. This group's response to alternatives, however, was more positive, suggesting that examinations should incorporate more questions like 'explain your interpretation' or 'describe how you would handle this situation'. These same students felt that it was much easier to prepare when one did not have to learn things off by heart, stating that the work that they knew 'perfectly last year' could not be recalled anymore.

As was mentioned in the previous chapter, the students who participated in the focus groups did so in an open and enthusiastic manner. Many of their responses served to underline much of what had been articulated by the lecturers. Most of the students who took part in the focus groups demonstrated a mature attitude towards their studies. It is clear that they much prefer an interactive classroom approach, and felt that learning was more likely to take place when active learning and assessment techniques were used. They also acknowledged their own responsibility in the learning process and recognised the value of generic skills, more specifically the critical outcomes, for future success. The students had a definite human resources focus, seeing the diploma as a unit which would eventually lead to their entering a specific career. Unfortunately, they inevitably all returned to emphasising the importance of final marks and end-of-year examinations which most acknowledged led them to revert to a system of learning 'off by heart'.

## 4.2.4 Survey

The survey, which required the completion of a questionnaire by the second-year Human Resources Management students during class time, provided further valuable data. The rationale behind using the questionnaire as well as its design has been addressed in Chapter Three (3.5.3). This measuring instrument comprised six questions and the responses generated will be addressed chronologically.

#### Question 1

The students were asked to supply their student numbers. These were recorded to confirm authenticity and will be retained for possible follow-up research.

#### Question 2

The participation profile of the survey (Table 4.1) reflects fairly positively when compared with that of the profile for the Human Resources Management Diploma and the Faculty of Management as a whole.

Table 4.1: FTE student enrolments versus survey participants

	Females	%	Males	%	Total
Faculty of Management*	1680	65.1	900	34.9	2580
Human Resources Management *	419	73.1	154	26.9	573
Survey participants	43	70.5	18	29.5	61

<sup>\*</sup>Source: Cape Technikon. Department of Institutional Research and Planning 2002.

#### Question 3

In Question 3, the students were required to list, in order of importance, the skills they believed to be most critical to the work of a human resources practitioner. A complete list of the responses is attached as Appendix F, while Table 4.2 offers a summary of the skills that were listed and the percentage of the total responses that they received. Skills that received fewer than five mentions have been discarded.

Table 4.2: Skills listed by students as key to the work of the Human Resources practitioner

Skills listed	% of responses				
Communication (oral and written)	82.0				
Identify and solve problems	39.3				
Interpersonal skills	36.1				
Listening	34.4				
Leadership	31.2				
Managerial skills	30.0				
Using technology	23.0				
Sensitivity to other cultures	23.0				
Group work skills	21.3				
Managing conflict	16.4				
Manage yourself	16.4				
Job knowledge	13.1				
Analytical skills	11.5				
Creative thinking	8.2				

It is apparent from Table 4.2 that almost all students believe that communication skills are the most important prerequisite for success in their chosen field. If one considers that the third and fourth highest scoring skills, interpersonal skills and listening skills, are of themselves part of the dynamics of effective communication, then the importance placed on this skill by the students is self-evident. The fact that 'identify and solve problems' received the second highest rating, confirms the discussions that took place during the focus groups as mentioned earlier.

Most of the critical outcomes are reflected in the list. This might have been expected given that the list was included in the questionnaire and some of the respondents had also attended the focus group discussions, but perhaps more interesting is the order in which the students placed the skills. So, for example, communication drew thirty-six of a possible sixty-one first places, followed by interpersonal skills which drew seven. Leadership was the most popular choice in the second position, with problem-solving drawing the most votes in the third and fourth placings. Of note is the absence of three of the five developmental outcomes that address developing entrepreneurial opportunities; reflecting on a variety of strategies to learn more effectively; and

participating as responsible citizens. On the other hand, aspects such as leadership, managerial skills and job knowledge were added to the list. These additions are not surprising. A list of the characteristics of a good leader would incorporate many of the skills or traits that are in any case part of the acknowledged generic skills such as problem-solving skills, team building abilities, excellent communication skills and so forth (Middlehurst 1993), and a list for the modern manager should, in all likelihood, reflect similar characteristics. The mention of job knowledge suggests that not all have a clear understanding of what skills actually are.

#### **Question 4**

In view of the fact that the study guides made, in only some instances, limited reference to the critical outcomes, and given that the lecturers themselves acknowledged that they had not discussed these outcomes specifically with the students, it was necessary to compile questions that shed light on related issues. The point regarding a need for employing innovative and varied forms of methodology both for teaching and for assessment, when integrating generic skills, has already been made in this study and thus the questions in this instance addressed student perceptions of certain aspects of classroom activities, assessment factors and some personal learning issues.

The details of the responses received to Question Four are attached as Appendix G. For the purpose of analysis, the first two response options, namely 'always true' and 'often true' were combined and produced the following results:

Table 4.3: Percentage of students who responded affirmatively (always true/often

true) to the statements listed (n=61)

	Statement made	% of responses		
4.1	My lecturers create opportunities for me to participate during classes			
4.2	We spend more time in class listening to a lecture than discussing the work			
4.3	I prefer attending large classes (more than 30 students) rather than smaller groups			
4.4	My lecturers show how my different subjects are all linked to one another			
4.5	My lecturers use examples from industry to explain the theory discussed in class			
4.6	I learn more from doing a research project that from preparing to write an exam			
4.7	I find it easier to prepare for multiple-choice questions than for long questions			
4.8	My lecturers are more concerned about me as a person than about the amount of subject knowledge I can obtain			
4.9	My exams at the end of 2001 required me to apply what I had learned during the year			
4.10	My practical assignments challenge me to think creatively			
4.11	My lecturers discuss potential job and entrepreneurial opportunities in class			
4.12	When I do an assignment in a group I usually produce a better result than when I work on my own.			
4.13	I get frustrated when I know an answer to a question, but cannot express myself clearly			

The overwhelmingly positive response received to Statement 4.1, namely that lecturers create opportunities for the students to participate in class, endorsed the responses that had been received from both the lecturing staff and the students in the focus groups, and made it clear that there is considerable interaction taking place in the classroom. In addition, the high scores achieved for Questions 4.5, 4.9 and 4.10 respectively, show that the students are being encouraged to see links with industry, that they experience their practical assignments as creatively challenging, thus developing another generic skill, and that their examinations encourage them to apply what they have learned. The 60.7% score achieved for Question 4.6 further bears out the notion that the students realise that more learning takes place when they are thinking creatively than is the case when preparing for an examination which, as was seen in the focus groups, often encourages rote learning. While the low score achieved by 4.2 corresponds with the response to 4.1, the score for 4.3 suggests that students have become used to smaller groups and find them preferable to larger classes. Conversely, however, only 31.1% of the students believe that they produce a better result when they work in groups, a perception that was also noted in the focus groups.

Although Question 4.11, that referred to the extent to which job and entrepreneurial opportunities are discussed during class scored 36.1% on the combined rating, its midpoint rating ('sometimes true') was 37.7%, with only 3.28% of respondents stating that this was never true. Again, this response corresponds with the focus groups that had mentioned this as being a critical outcome that was being addressed.

An apparent anomaly is found in the particularly low score received for Question 4.8, indicating that the students still overwhelmingly perceive the objective in the classroom to be that of acquiring specific content knowledge, this in spite of a response to the contrary received by one of the focus groups. However, this scoring is placed in perspective when one considers the fact that

- although the academic staff feel that the development of generic skills is implicit in what is happening in the classroom, they still all focus on subjectspecific content;
- even though certain assessment tools require the student to utilise a number of generic skills, the final mark seldom takes into account the extent of such utilisation; and
- the student's focus is to pass the subject which, within the current assessment structure, relies largely on the results of term tests and an endof-year exam.

#### Question 5

The open-ended responses received to Question 5, which are summarised in Appendix H, served to confirm much of what had been gleaned during the focus groups regarding the development of the critical outcomes. In several instances the students referred to the presentation of projects, reports, portfolios, the compilation of business plans, conducting case studies of existing businesses, and so forth, stating that these had contributed to developing the different generic skills. Again the students recorded a list that mirrored the SAQA ideals, including the use of group work which often required conflict resolution skills and cultural sensitivity; the creative approach that was used in designing the end product; the need for communication skills (both written and oral); the importance of managing oneself and one's time during the process; the ability to collate, analyse and interpret information; and the use of technology in gathering such

information and in presenting the final product. Limited reference was made to entrepreneurial skills and community involvement, while no student cited developing more effective learning strategies in their responses. Interestingly, these latter three outcomes form part of the developmental outcomes as listed by SAQA.

#### **Question 6**

The final question was included to address the emphasis placed on examinations by the current assessment system as well as by the students during the interviews. In this question, the students were asked which forms of assessment they believed would most effectively assess the extent to which they had developed a particular critical outcome. Table 4.4 provides a summary of the responses received.

Table 4.4: Students' perceptions of appropriate assessment methods or instruments (n = 61)

	Case study	Research project	Role play	Multiple- choice	Group	Portfolio	Written exam or test	Oral exam or test
Identify and solve problems	34	8	8	5	19	1	4	1
Work effectively in a team/group	5	21	22	0	34	1	0	1
Manage yourself and your activities responsibly	4	20	7	5	8	16	13	5
Collect, analyse and organise information	5	41	5	2	5	8	4	3
Communicate effectively both orally and in writing	4	11	21	1	10	3	15	26
Use technology effectively	4	23	17	1	6	8	1	4
Explore links between your different subjects	12	17	4	5	15	6	10	2
Participate in community activities	5	12	10	1	30	3	1	1
Be sensitive to other cultures	12	13	29	3	23	3	0	2
Appreciate beautiful things	11	14	17	1	7	6	2	2
Explore career opportunities	15	35	6	0	13	6	3	2
Utilise entrepreneurial opportunities	15	28	8	0	11	7	4	2
Totals	126	243	154	24	181	68	57	51

The responses received to this final question may be subject to considerable scrutiny by the assessment expert and possibly lend themselves to a wide variety of interpretations and contradictory analysis that fall beyond the parameters of this research. What they do demonstrate within the ambit of this study is that student perceptions regarding methods of assessment for generic skills concur with recommendations found in the

literature (University of Stellenbosch. Faculty of Education 1999; Entwistle 2000). While debate regarding student likes and dislikes, clouded by what they perceive to be 'easier', may be raised, the overwhelming support given to the research project and group exercises to the detriment of the traditional test and examination approach, suggests a preparedness among students to embrace new teaching and learning paradigms (Barr & Tagg 1995; Scouller 1998) that subscribe to these more innovative techniques. Similarly it implies that such innovative techniques do indeed contribute to the development of generic learning outcomes.

#### 4.3 CONCLUSION

The findings that have been described in this chapter point to a number of issues that, within the context of the case study, appear common across the different data sources. Key among these is the fact that currently there is a lack of clarity among academic staff regarding the critical outcomes: what they are, what they entail and how they ought to be integrated into programmes of learning. However, academic staff are aware of being uninformed and feel that there is a need for staff development and additional resources if they are to continue effectively on the path of integration.

Nevertheless, many feel that the development of generic skills is taking place naturally within the current context, a claim supported by the student respondents. In addition, many of the teaching practices currently employed at the Technikon embrace methods and approaches that have been seen in the literature review (2.4.3.2) to be conducive to developing generic skills. However, more traditional assessment practices and systems are not being aligned with the innovative teaching practice being implemented.

From the student responses, which largely supported claims made by academic staff, it appears that most perceive their studies to be part of a programme of learning and are encouraged to see the links between their subjects. In addition, the students appear comfortable in taking part in many of the active learning processes that take place in the classroom; believe that they are developing generic skills; and seem regularly to transfer knowledge across disciplines.

In Chapter Five the implications of these findings will be addressed and then compared with the relevant literature. Conclusions will be drawn and will then provide the basis on which recommendations will be made. Finally, opportunities for further research as they have presented themselves in the study will be addressed.

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# CHAPTER FIVE

## Conclusions and recommendations

We shall not cease from exploration And the end of all our exploring Will be to arrive where we started And know the place for the first time. (Eliot 1963:222)

#### 5.1 INTRODUCTION

This study has focused on providing a critical analysis of the role of generic learning outcomes in programmes of learning within a technikon environment. In the opening chapter, an orientation to the study was provided by describing the imperatives that have led to higher education institutions all over the world addressing the issue of generic skills among their students and graduates. In this same chapter, the problem that formed the *raison d'être* for this research, namely that SAQA has mandated the incorporation of at least some of their critical outcomes into all programmes of learning, is addressed. The ramifications of this requirement, and the challenges, concerns and uncertainties that result, are woven into the fabric of the study providing a focus and constructing the theme around which the work has evolved.

The overview of literature as set out in Chapter Two, reported on the complexity and extent of the 'skills debate'. The issue of generic learning outcomes is not only addressed from a macro and micro perspective, but is also tracked chronologically to show how the role of these outcomes appears to have grown in importance in recent years. Care was taken to provide clarity amidst the multitude of appellations afforded to generic learning outcomes, and a summary of some of the key approaches to, and attitudes towards, integration is provided.

In Chapter Three the research design is described by offering an account of the methodology employed. Thus there is a description of the approach and strategy followed; the focus of the research; and the techniques used for gathering data. In each instance the decisions made by the researcher in terms of process and approach are clearly explained and substantiated. Chapter Three also refers to the process of data

analysis that was followed, discusses issues of validity and reliability in the research, and reports on the limitations of the study.

The findings of the empirical research that resulted from the process described in Chapter Three have been collated and reported in Chapter Four. The information is presented chronologically, grouped according to the method used for generating the data and, where appropriate, similarities, trends and key themes have been highlighted. It is, however, necessary to draw the many strands together. This closing chapter will, therefore, address the implications of the findings, draw logical conclusions, provide meaningful recommendations for future practice, and offer insights into areas for further research.

#### 5.2 THE IMPLICATIONS OF THE FINDINGS

To facilitate the discussion of the implications that logically can be drawn from the findings that are discussed in Chapter Four, this response will be clustered around key themes that have emerged during the study. These themes relate to the current levels of awareness regarding generic learning outcomes; approaches to teaching and learning including assessment practice; and, finally, the implications for academics, students as well as career-oriented institutions such as the Cape Technikon.

#### 5.2.1 Current levels of awareness

There are two key dynamics that ought to be driving the incorporation of generic learning outcomes into programmes of learning at the present time in South Africa. The one is the national imperative of the SAQA requirements (SAQA 1997), the other is an international trend that now recognises the need for integrating generic skills into curricula at higher education institutions so as to enhance the employability of their graduates (Clancy & Ballard 1995; EISD 1999; Chapple & Tolley 2000; Soontiens & De la Harpe 2002). In Chapter Two, both of these dynamics have been addressed at some length, yet the findings of the study suggest that within the walls of the institutions themselves, these imperatives are unclear, resulting in a limited response to the external demands. The review of the study guides and the subsequent interviews with the academic staff, highlighted three issues in this regard. Firstly, staff were instructed to re-design their study guides and, by implication, review their subject curricula, to

meet the SAQA criteria and thus also include the critical outcomes. Not one of the inspected study guides currently fulfils this requirement fully. Secondly, all staff interviewed acknowledged that they had limited information specifically relating to the critical outcomes, and the rationale behind their required inclusion. Finally, that during the interviews, having been made more conversant with SAQA's critical outcomes, most staff recognised a potential role for such generic learning outcomes in developing future graduates, albeit with certain reservations.

What are the implications of these findings? First of all, although staff were instructed to review their curricula according to SAQA guidelines, it appears that few were adequately informed about what was required, nor, seemingly, was there any form of subsequent evaluation to determine whether the instruction had been carried out appropriately. When this is considered against the backdrop of the diversity in terminology and approach that was discussed at some length in Chapter Two, the reality of the potential for confusion and frustration as articulated by some of the respondents becomes self-evident.

Several other aspects need also to be noted. The fact that academic staff were instructed, rather than motivated or encouraged, to re-curriculate, as well as the fact that they had serious reservations regarding the feasibility of effectively integrating generic learning outcomes, has further implications as to the willingness among staff to be committed to the given task. The issue of responding to a directive that requires implementing a process that is perceived as uncertain in terms of its potential for success, while at the same time adding to one's workload will, however, be discussed later in this chapter (5.3.3).

In South Africa the process that led to the formulation of the critical outcomes apparently did not solicit input from the average academic, and ensuring buy-in amongst the teaching staff at higher education institutions was always going to be a difficult task. This has also been the experience in some institutions in the UK (Atlay & Harris 2000) and Australia (De la Harpe, Radloff & Wyber 2000), where those responsible for leading the process of integrating generic learning outcomes went to considerable lengths to not only provide staff with information regarding these

outcomes, but also supply them with background regarding their validity and importance. At many institutions, the starting point for integrating generic learning outcomes came most often in the form of workgroups, workshops, task teams and the like, formed largely among the academics who would later be responsible for the development of the skills in the classroom (Atlay & Harris 2000; Chapple & Tolley 2000; De la Harpe, Radloff & Wyber 2000; Sparrow & Sharp 2002). From the uncertainty that underpinned many of the responses received during the interviews, and from the way in which, in some instances, the critical outcomes were inappropriately incorporated in the study guides, it is clear that this has not occurred in this instance.

Subsequent to the literature review that was conducted for this study, a combined study team made up of representatives from both the Department of Education as well as the Department of Labour (2002), has published an extensive report on the implementation of the NQF. In this report, the study group makes mention of the fact that little reference was made to the critical outcomes in the submissions that they received while conducting their research. The report recognises that there appears to be limited awareness regarding these outcomes at educational institutions and, thus, limited implementation (DoE & DoL 2002). As was noted in the literature review, however, this situation has an international precedent. Given that the skills debate commenced in the early 1990s in a country such as Australia with the Finn Report (Australian Education Council, 1991), Clancy and Ballard (1995), writing some four years, later expressed similar concerns regarding a lack of clear evidence of changed curricula in universities However, by the turn of the century, this situation appears to have in Australia. changed with a whole plethora of Australian researchers (Edwards 2002; Mummery 2002; Snoke, Underwood & Bruce 2002; Sparrow & Sharp 2002; etc.) sharing their experiences relating to integrating generic learning outcomes during the 2002 HERDSA conference in Perth. As higher education institutions prepare for the 2003 submission of programmes for registration, practitioners can take advantage of being able to select from best practice as described elsewhere in the world and learning from mistakes that have already been made.

Another concern in the responses received is the seemingly ad hoc approach that has been employed in the process of actually integrating the critical outcomes into the study guides and preparing staff and students alike for their impact on teaching and learning. From the responses received it appeared that there was no framework or plan for integration (4.2.2.1). Such a lack of strategy has been noted elsewhere. Tait and Godfrey (1999:245), writing from a UK perspective, state that 'universities still tackle the enhancement of study and generic skills somewhat patchily, ... '. This could have serious implications that might result in political posturing typical of mere compliance and a lack of commitment among staff (Clanchy & Ballard 1995). A more feasible reaction, as described in the literature review, has been to implement a strategic framework and structured approach to the process of integration (2.4.3.1). It is to the credit of the majority of the staff who took part in the study that they have, in the absence of clear guidelines, still attempted, where possible, to fulfil the SAQA precepts.

The lack of clarity notwithstanding, all of the academic staff interviewed claimed that the development of generic learning outcomes, SAQA's critical outcomes, is an integral part of the learning process that is being facilitated in the classroom and beyond. All felt that although these skills are not explicit in the aims and objectives of the subject guides, they are natural by-products of the teaching and learning approach that is being employed in the classroom, a sentiment also noted in the literature (Steven & Fallows 1998).

## 5.2.2 Approaches to teaching and learning

It has been suggested that an inevitable result of incorporating generic skills into programmes of learning, thus a change in curriculum, should be a change in the approach to teaching and learning (Chapple & Tolley 2000). In South Africa, the added dimension of introducing an OBE approach in the classroom would imply an even greater transformation in terms of teaching methods, particularly given the learner-centred approach that should underpin these new paradigms. Most of those who took part in the study appear to have found it problematic to 'make explicit what students are expected to learn' (O'Brien 2000:35) when it comes to the critical outcomes, and stated that they had not necessarily changed their approach in the classroom. Yet from their responses it became clear that they were already incorporating any number of innovative, active, learner-centred techniques in the classroom, a claim that was, for most members of staff, substantiated during the student focus group interviews

(4.2.3.3). When the academic staff were asked about this approach, however, most felt that the teaching methodology being employed was more in response to the needs of the student in the classroom, than to any legislation or top-down directive (4.2.2.2). This suggests that among the staff at the Technikon there are those who are open to, and are indeed practising, approaches to teaching and learning that are perceived to be not only representative of new paradigms, but also those most conducive to developing generic learning outcomes (Steven & Fallows 1998).

In addition, as has been mentioned earlier, most staff felt that their approach to teaching and learning inevitably led to the development of the critical outcomes and evidence of this being similarly perceived in some cases by the students themselves has been presented in Chapter Four (4.2.3.3). Whether this case study can, however, be deemed representative of other diplomas in the Faculty or even of the Technikon as a whole remains, unfortunately, a limitation of this study. As long as the academic, whether as 'teacher' or as 'facilitator' remains in control of the content and the classroom, the extent of learning will remain a factor, albeit to varying degrees, of the personality and mindset of that particular academic. This aspect of teaching and learning, however, falls beyond the parameters of this study and remains a challenge to staff developers and researchers alike.

Thus there is a tension between what should be explicit in curricula, what the curricula should lead to in the classroom and the rationale behind the entire process. Malherbe and Berkhout (2001:68) suggest that 'the (critical) outcomes are very specific and an indication that they receive indirect attention will probably not suffice, especially since measurability and verifiability are usually required with regard to assessment criteria and practices'. Time, collaboration and reflection will be needed if what appears to be implicit, is to be explicitly presented.

## 5.2.3 Assessment practices

While it appears that there are many innovative, active, teaching and learning methods being employed in the classroom, the responses received from the interviewees clearly indicated a need for addressing assessment practices. Data generated on the issue of assessment has been presented in Chapter Four (4.2.2.4 and 4.2.3.4), and suggests

that the potential for extending learner-centred practices and the development generic learning outcomes is currently trapped within the confines of an apparently rigid assessment system. When asked to cite examples of instances where students were given an opportunity to demonstrate their competence in any of the critical outcomes, most staff made reference to a group research project or end-of-semester presentation. As reported in the previous chapter (4.2.1), however, these activities, in most cases, eventually contribute approximately 10% to the student's final mark, thus resulting in the final examination still contributing the major portion of marks. It should be noted that this phenomenon of utilising new teaching and learning styles, yet remaining fixed to conventional modes of assessment, has been recorded in the literature (Beylefeld & Jama 2002), and is currently a serious barrier to the developmental process.

Another concern is that from the focus groups it became clear that end-of-year examinations remain the single most important assessment experience in the students' minds. If such examination encourages a return to subject specific rote learning, as was articulated by several students during the focus groups, then a tendency to employing a surface approach to learning will be prevalent (Scouller 1998). Such a surface approach sounds a death knell to the development of generic skills, particularly critical analysis and problem solving and, therefore, nullifies the efforts of the academic bent on following a learner-centred approach in the classroom. Fransson (in Scouller 1998:453) has noted that students prepare for what they expect to be the performance requirements and, therefore, assessment methods and practice will need to be designed accordingly. It must be said that this, once again, has several implications, both for students as well as for academics. While it will be necessary for students to break from a rote-learning tradition as engineered by being part of a rigid summative assessment process, academics must become familiar with the many alternative forms of assessment available.

## 5.2.4 Further implications for academics

One of the most frustrating aspects of this research has been the realisation, as a fellow academic, that much of the work that has been done with regard to the re-designing of curricula to meet the requirements of OBE and SAQA, has seemingly been of limited value. This is particularly true if assessed, based on the outcomes as presented in

some of the study guides and the responses of the academic staff during the interviews. Although most of the staff claimed to have completed this task, some acknowledging that it was still being reviewed, not one of the study guides provided a complete example of integrating the critical outcomes. At a time when academics are placed under considerable pressure, the need for commitment to the process, underpinned by a realisation that it remains one of 'work in progress', is critical. Such commitment and realisation are reliant on the involvement of management and a consultative and structured process that is clearly articulated and jointly determined. In Chapter Two (2.4.3.1), mention is made of a number of instances where institutions have undertaken a strategic approach to integration where managerial support and staff involvement have been paramount. Although there may be few long-term studies relating to the incorporation of generic learning outcomes and the processes that are most appropriate in such circumstances, much has been written on collaborative and consultative leadership styles in many other situations (Middlehurst 1993; Senge 1993; Leaming 1998; Kapp 2000), and there is no reason to believe that the dynamics would be different in this case.

Perhaps the most important implication for academics to emerge from this study, however, is the extent of the task with which they are confronted. Staff are not merely expected to acquire an understanding of what the critical outcomes are and why they are deemed such. They do not only have to re-write study guides and subject outlines or curricula, to incorporate these critical outcomes in a sensible and meaningful way, a task for which they may not have been prepared. But, in addition, there is a supposition that they are themselves well-versed in each of the outcomes and competent in developing them in others. It is evident from the study, that in most instances this does not appear to be the case, and academic staff will need extensive support and guidance, not only in the form of staff development interventions, but also in terms of time and rewards (De la Harpe & Radloff 2000). As has also been seen in the study, over and above the fact that not all of the staff interviewed perceived themselves to be competent in each of the critical outcomes, they were, in some instances, not convinced that they should be. This lack of conviction among staff has been raised in the literature (De la Harpe, Radloff & Wyber 2000), and reflects on the importance of obtaining the commitment that has been noted earlier. The need for staff to be fully informed from the

outset during any process that implies considerable change both in curricula and methodology is non-negotiable (2.4.3.3).

## 5.2.5 Implications for students

The study raised a number of issues that have considerable implications for the student who is expected to be at the receiving end of a process that seeks to develop generic learning outcomes. Recent research shows that 'the more students were exposed and supported to develop their professional skills, the more they perceived that their skills had improved and been developed' (Soontiens & De la Harpe 2002:607). This also emerged from the responses received from the students in the focus group interviews who, even though they admitted that they had not been formally introduced to the critical outcomes, believed that many of the skills had indeed been addressed. Most students felt, for example, that their ability to work in groups had developed considerably from their first year to their second year of study simply by virtue of the amount of group work they had been required to conduct (4.3.2.1). Thus, while this study does not attempt to determine whether or not specific practices relating to integration of generic learning outcomes are indeed successful, there appears to be a perception among the students that much of what is being done in the classroom is contributing to their success. Another aspect of this is that students appeared comfortable with the active, learner-centred techniques being employed and were, in fact, critical of those members of staff who preferred more traditional modes (4.2.3.3). However, while one might surmise that an understanding of the importance of acquiring or developing such skills might motivate students to commit to them, the extent to which such acquisition or development actually takes place remains largely un- or underassessed.

During the interviews all of the academic staff made reference to the extent of underpreparedness, especially among first-year students, and to the diversity that now characterises the student population, suggesting that many of the changes they had brought about in their teaching and learning methodology had been prompted by a need to meet the demands of the student in the classroom. The implication of this is that the staff, whether consciously or sub-consciously, have adapted teaching styles to meet the needs of their students. This, in itself, is an extremely positive response to what is a demanding situation. A further implication must then be that, if the critical outcomes are now to also be made explicit in the curricula, thus interwoven into seemingly appropriate teaching and learning activities (Harvey 1999), the potential for development must surely be enhanced.

Reference is made in Chapter Two (2.4.2) to the attitude of the students towards generic learning outcomes, with some research showing that students did not necessarily attach the same academic significance to developing these skills as opposed to acquiring discipline-specific knowledge (Laughton & Montanheiro 1996). It is interesting to note that in the case study described in this thesis, however, students placed considerable value on the different critical outcomes, particularly those that they perceived relevant to their chosen career (4.2.4). Such value is, however, tainted, as the students did not relate the critical outcomes to any summative assessment practice. This deficiency, whether real or perceived, relates to the earlier discussion on assessment, as it reinforces the need for the role of assessment in the integration process to be addressed. The results of this study and the literature suggest that if this can be done, the potential for advancing student learning should be enhanced (Entwistle 2000).

## 5.2.6 Implications for technikon programmes

This research has focused on programmes of learning within the technikon sector and it has been the contention of this author from the start that the nature of technikon education lends itself to effectively integrating generic learning outcomes into its programmes. The career-oriented focus of the diplomas provides an excellent platform for developing SAQA's critical outcomes, as has been seen from the responses received in the survey (4.2.4). The fact that national curricula for the various diplomas are decided at joint technikon forums, similarly provides an opportunity for addressing the programme, and, therefore, the integration of the critical outcomes, as a unit. If this process can be led by a group of informed and committed academics, it can conceivably lighten the burden the academics at the different technikons, who then receive a framework curriculum on which to base their individual study guides.

The nature of the national diploma programmes, which include certain 'generic' subjects such as Communication in English and End-user Computing, also provides the programme designer with further opportunity to incorporate the critical outcomes, and it was evident from the responses received from the students that they perceived these subjects to be fulfilling this role. In addition, most national diploma programmes also include a period of experiential learning that gives the student an opportunity to apply theory in real-life situations. Whether the focus groups and the survey would have received similar responses regarding the extent to which generic learning outcomes are inevitable by-products of the programme, from undergraduate students following, for example, a generic bachelor's degree, is not known. Nevertheless, it would appear that, in this instance, technikons do have an advantage over many of the universities where such generic subjects are not as universally part of the study programmes.

#### 5.3 RECOMMENDATIONS

The original intention of this study was to provide guidelines, based on the findings of the critical analysis and informed by lessons learned regarding best practice from the literature, to assist those tasked with designing programmes of learning within the new higher education framework. This intention was specific to target generic learning outcomes as articulated by SAQA's critical outcomes and placed within the technikon sector. Having reviewed the findings and considered their implications, the overriding recommendation becomes that of applying a strategic framework (Steven & Fallows 1998) that will guide the process of embedding or integrating generic learning outcomes or, specifically, SAQA's critical outcomes, into programmes of learning. Such a framework would comprise four key elements, namely, clarifying terminology and interpretation; following a holistic process approach in mapping generic learning outcomes; obtaining staff commitment; and planning for evaluation and reflection.

The case studies discussed in the literature review showed the need for congruence when it came to implementing a structured approach to integrating generic learning outcomes, an aspect that has been lacking in the case that provided the focus of this study. It would appear that in order to facilitate the integration in a meaningful manner, it is necessary to provide a framework within which such integration can occur and to offer a step-by-step process for those involved. Placing such a process within a

strategic framework, however, implies institutional commitment with senior management support, 'an institutional approach' (Atlay & Harris 2000:76).

At the Edith Cowan University a framework for process was developed which provided for such a step-by-step process (Sparrow & Sharp 2002). Their framework, which included a consultative process to determine which generic learning outcomes would be relevant to the different courses, would, however, not necessarily fit the South African situation in its entirety, given that SAQA has already defined the list of desirable outcomes. Nevertheless, much can be learned from their approach which included selecting generic learning outcomes that matched specific courses; reviewing and amending course documentation; revising teaching and assessment methods; and implementation and evaluation (Sparrow & Sharp 2002:620). Thus, the results of the research described in this thesis informed both by the literature and the Edith Cowan experience, form the basis for the recommendations that follow.

## 5.3.1 Clarify terminology and interpretation

One of the key concerns raised in this study has been the lack of clarity, both in terms of terminology and interpretation, that characterises the current situation regarding the integration of the critical outcomes into programmes of learning. Addressing such confusion with all the stakeholders (staff, students, industry and the community) is therefore a prerequisite to any intervention. This implies more than simply agreeing to the name to be given to the generic learning outcomes, a decision that SAQA has essentially made on behalf of education institutions in South Africa; it also requires that all concerned have congruent understanding of what each of the critical outcomes entails. So, for example, Table 2.1 presented a list of key competencies with clear, detailed definitions of exactly what is understood under each of the variables listed. Such definition would provide a common platform from which further action could be initiated and offers a model for those tasked with integration.

# 5.3.2 Apply a holistic approach

When SAQA first presented the critical outcomes, it recognised that not every unit of learning would lend itself to the development of all twelve outcomes listed (SAQA 1997), but expressed a desire that '[P]roposers of qualifications should ensure that all Critical

Outcomes had been addressed appropriately at the level concerned within the qualifications proposed' (DoE & DoL 2002:84). While this might prove problematic at, for example, universities, where in many instances students can compile their own programme of learning drawing from a number of electives to make up a qualification, the student completing a national diploma is placed on a specific trajectory that has as its main focus successful entry into a specific career. The programme, as registered with SAQA, articulates pertinent objectives that serve as generic goals for each individual subject that is offered within it. Currently, each subject then provides its own set of specific outcomes which, when combined with those from all the other subjects, fulfils the objectives of the programme as a whole.

This approach is similarly recommended when integrating the critical outcomes, allowing for a situation where each subject carries a portion of the responsibility for development. Approaching the programme as a unit also has the advantage of providing opportunity for interaction among the academic staff in a particular department or unit as staff are encouraged to work collaboratively on the project. As was seen in Chapter Two (2.4.3), there is a precedent for such departmental interaction and this can, in turn, create an environment where the academic staff provide a support base for one another.

Another consequence of addressing the integration process within a unitary approach is that it allows for the development of the skills to be addressed at different levels from the first year through to the third. As the student matures and progresses from basic concepts to more complex subject-specific contexts, she or he can progress in similar fashion with regard to the critical outcomes. This notion of structuring the development of generic learning outcomes was also raised by one of the academic staff interviewed and is referred to in the literature review which gives an account of instances where curricula were designed to sequentially develop skills over, for example, a three-year period of study (Monks 1995; O'Brien 2000).

It is important to realise that simply including minor annual adjustments is not what is meant by 'redesigning curricula'. Within a holistic process approach it is necessary to take cognisance of the bigger picture. For curriculum development to have integrity it is critical for such development to be 'accepted as being qualitatively different from grafting and pruning; with every significant addition or subtraction, the whole needs to be reviewed' (McKenzie, Morgan, Cochrane, Watson & Roberts 2002:431) and, of course, acted upon.

#### 5.3.3 Ensure staff commitment

The recommendations that have been articulated thus far imply certain assumptions regarding the involvement of the academic staff. A question raised early in this study, that of staff commitment, remains central to the adoption of any strategic process (2.4.2). Not only will it be necessary for designated and informed members of staff to be tasked with driving the initiative, and given time and resources to do so, but they will also have to proceed with care and caution when dealing with all the stakeholders. The concerns among the staff that formed part of this study, those of time pressures, an increasing polarisation of student capabilities, and increased diversity, to name but a few, are not unique to the department that provided the focus of this study. Documented instances of resistance among academic staff to embrace the notion of developing generic learning outcomes were highlighted in Chapter Two (2.4.2) and they need to be taken seriously.

Change always faces resistance and those responsible for driving the process need to be mindful of a perception, as expressed during one of the interviews, that this is all part of change for change's sake. Beylefeld and Jama (2002:120), when addressing similar concerns, caution that 'if higher education institutions are interested in re-designing learning contexts, they should balance what is officially wanted, what is technically possible in the circumstances and what has evolved so far through consensus among colleagues'. Management will have to do more than simply give the process their stamp of approval if staff are to become committed to the process. Concerns will have to be addressed, guidance offered, training provided and rewards, particularly with regard to time release, given specifically to staff who are prepared to participate actively in the process of integration.

## 5.3.4 Evaluate and reflect on integration process

Perhaps the most important aspect of this research has been the realisation that the process of integrating generic learning outcomes or, specifically, the critical outcomes into programmes of learning, be seen as work in progress. Even at Alverno College where the practice has been established for over twenty years, the need for annual evaluation of, and reflection on, the curricula, the approaches to teaching, learning and the practice of assessment, remain true (O'Brien 2000). The issue of evaluation and reflection remains central to the process and time must be allowed for academic staff, particularly those within a specific department, to discuss and share concerns and successes with one another. Earlier in this study (2.4.2), the importance of maintaining consistency and also ensuring quality during the process of integration was highlighted. Implicit in all the discussion thus far has been the notion of consistent and quality teaching and learning practices underpinning the process of integration and, particularly, implementation. Monitoring of the consistency and quality, however, has not been addressed, and must then be added to the list of reasons why reflective and evaluative conversations should take place. Such discussion should then feed into the shaping of curricula and resultant practice on an ongoing basis, closing the loop.

Keller (in Sparrow & Sharp 2002:619) is quoted as warning that often attempts at changing the status quo fail because scant attention has been paid to the needs and inner motivations of those affected by the change. In the immediate future, it will be necessary to address such needs and motivations if the implementation of the SAQA mandate is to reach its full potential. Even as the final paragraphs of this thesis are being written, new research integral to this study is being published. In addition, and subsequent to the literature review and the fieldwork conducted, a campus-wide staff development initiative has been launched by the Cape Technikon's Teaching and Learning Centre specifically focusing on re-curriculation. At the same time the Faculty of Management has launched a tandem project, and inter-departmental workshops are being held to inform and assist academic staff in the process of re-curriculation. Incorporating generic learning outcomes, specifically SAQA's critical outcomes, should be integral to this task and will, it is hoped, be addressed during these interventions.

## 5.4 OPPORTUNITIES FOR FUTURE RESEARCH

Several potential research problems have presented themselves during this study. the first chapter of this thesis, the reader is prompted to see the research as 'work in progress' (1.8), this in itself suggesting that more research is to follow. This study has had a very specific focus confined to an undergraduate, technikon National Diploma. By using the case study approach, the findings represent a slice in time and are, therefore, limited in their long-term applicability. Further research, that will span a number of years, tracking progress systematically over a period of time, is critical if future practitioners are to be given meaningful directives. Such longitudinal studies could provide insight into a number of key issues relating to generic learning outcomes. SAQA has provided us with a list, but are these, indeed, the most critical outcomes and are they generic to all programmes in higher education? Are current interventions making a difference to the 'full personal development of the learner'? Are students, who have been exposed to the 'critical outcomes' in a seemingly appropriate way, more successful as learners and/or graduates? The possibilities are numerous, reminding one of the 'skills agenda' (Holmes 2000:202) being a multi-facetted controversy that still has numerous loose ends (2.3). It is these 'loose ends' that researchers must address.

The role of assessment in developing generic learning outcomes cannot be overestimated, and yet, this remains a grey area for many embarking on integration. In a recently published report by a study team on the implementation of the NQF (2002), the absence of references to assessment issues is raised with the team acknowledging that 'it is a very difficult area of practice, both here and abroad' (DoE & DoL 2002:79). This same report, however, appears cautiously optimistic that the challenges presented by assessment in an outcomes-based education system can be met. Assessing generic learning outcomes within such a system, however, compounds the challenge. The assessment of the critical outcomes has also been addressed by the study team mentioned above. This group now recommends that 'a distinction be drawn between the first five Outcomes, which are at least potentially assessable, and the rest, which are educational aims' (DoE &DoL 2002:84). On what basis are they now deemed 'potentially assessable', how does one most effectively conduct such assessment, and when is one competent? There are many issues relating to assessment and its practice that require potential researchers' immediate attention.

Another interesting point raised in the study, albeit briefly, was the possible use of web-based approaches to developing generic learning outcomes (2.4.3.2). In the technologically driven age that we live in, where notions of adult education and lifelong learning have priority of place, the potential of this and other similar innovative approaches cannot be ignored. Similarly, questions raised about the transferability of generic skills, appear to have been contested in the findings of this study. Further research that might provide more conclusive evidence, and explain why this case study generated such contradictory data, would also be valid.

At this point one must take cognisance of those who may fear that what has been recommended will limit the autonomy of the academic and restrict her/his potential for innovation and creativity. Inevitably, there is the threat of exchanging the current uncertainty for a rigid autocracy (DoE & DoL 2002). The acid test must surely be the extent to which new approaches and structures will contribute to learning, quality learning, taking place in the classroom. As has been mentioned earlier in this thesis, the process of integrating generic learning outcomes into programmes of learning remains an issue of considerable debate with few in-depth studies having tracked the progress of students through, for example, a three-year undergraduate programme where interventions specific to developing the skills have been facilitated. The possibilities for research in this field, particularly in South Africa, are therefore, extensive.

#### 5.5 CONCLUDING COMMENTS

This report gives an account of a study undertaken to allow for a critical analysis of generic learning outcomes as they present themselves in a technikon diploma programme. To support the analysis, an overview of relevant and related literature was provided. This overview, found in Chapter Two, not only tracked the historical progress of generic learning outcomes, but it also described the many forces, both from a national and international perspective, that have contributed to the 'skills debate'. In addition, given the complex and potentially confusing nature of this topic, the many terms and interpretations, as well as some existing approaches to integration, were defined and described.

The overview laid a platform for the empirical study that followed. The qualitative data, generated via multiple techniques, was 'a source of well-grounded rich descriptions and explanations of processes in identifiable local contexts' (Miles & Huberman 1994:1). Thus, after explaining the research methodology and detailing the findings, the researcher was able to draw conclusions, although limited within a specific context, and offer recommendations.

In the final analysis, however, one might argue that this study has raised more questions than it has answered. The many opportunities for research that have been mentioned above attest to this; and there are probably more. But in the meantime, the immediacy of active integration and implementation is upon us. In 2003 SAQA requires the next phase of the submission of qualifications for registration to take place and it is clear that the issue of critical outcomes is not going to disappear. The recent report on the implementation of the NQF reminds that 'Critical Outcomes are deemed to be essential for the development of the capacity for lifelong learning. They are a central aspect of the NQF philosophy' (DoE & DoL 2002:84). To rephrase Gevers (1999), therefore, it is necessary to 'walk the road' while we 'think and talk'. Seeing higher education institutions as 'learning organisations' (Atlay & Harris 2000:81) is a key factor here and delaying until all eventualities have been addressed often results in no change at all.

The report from the study team seems to imply that those issues that are perceived as particularly problematic are not being addressed (DoE & DoL 2002). Avoidance of the issues will not, however, provide the competent graduates that the country needs. It is time, therefore, for academic institutions to consider the reality of the current situation and really see the wood from the trees. Higher education has entered a new phase, and there is no turning back. The many forces that have brought about the skills debate are real. Worldwide new trends in teaching and learning are rapidly becoming the norm, while industry continues to demand graduates who are 'employable' (Kruss 2002:3). Higher education institutions must provide for the new breed of student, by developing in her or him the skills that will provide for success.

In this study a strong case has been made for a structured, holistic approach to the integration of generic learning outcomes into programmes of learning at higher education institutions. Such an approach would trigger a process that could provide clear institutional parameters and the necessary guidance to practitioners tasked either with curriculum design or the implementation of the new curricula, or both. Inevitably, however, further questions arise. Will the integration of generic learning outcomes be a meaningful process in the long-term? Can higher education institutions really be expected to deal with the radical transformation imperatives they face? Ought one to be thrown off course by the recalcitrant and the immovable? Can academics risk simply responding to 'an obscure message' (4.2.2.1) that leads to curriculum design that is 'purely incidental' (4.2.2.1)? The answers to these questions are as complex as the issue that has been researched.

Yet, through the ages, higher education has weathered many storms and has shown a remarkable penchant for adapting while seemingly remaining strong. In South Africa, where over and above the many other challenges facing higher education, there is the additional challenge of meeting national goals, the need for higher education institutions to similarly transform while standing firm, is an imperative that cannot be ignored. The task is to enhance 'the quality of education and training ... thereby contributing to the full personal development of each learner and the social and economic development of the nation at large' (SAQA 1997:4). If, as this study suggests, the considered integration of generic learning outcomes into programmes of learning can contribute to achieving these national goals, then the way forward is clear. While the detail of how to proceed may remain debatable for some time to come, it would appear that the technikon sector is well positioned to take up the challenge and win.

### REFERENCES

Angelo, TA. 1999. Transforming departments into more productive and scholarly learning-centred communities: Guidelines from research to practice. Proceedings of the 22<sup>nd</sup> International Improving University Teaching and Learning Conference. Brisbane, Australia, 5-8 July 1999.

Atlay, M & Harris, R. 2000. An institutional approach to developing students' 'transferable' skills. *Innovations in Education and Training International*: 76-81.

Australian Education Council. Review committee. 1991. Young people's participation in post-compulsory education and training. [online] Available at: <a href="http://www-chs.ecu.edu.au/org/tlo/sif/jan">http://www-chs.ecu.edu.au/org/tlo/sif/jan</a> [Accessed: 11/09/2001].

Barnett, R & Griffin, A. (eds). 1997. The end of knowledge in Higher Education. London: Cassell.

Barr, RB & Tagg, J. 1995. From teaching to learning - a new paradigm for undergraduate education. *Change*, 27(6):13-25, November/December.

Bennett, N, Dunne, E & Carré, C. 1999. Patterns of core and generic skills provision in higher education. *Higher Education*, (37):71-93.

Beylefeld, AA & Jama, MP. 2002. Incorporating transferable skills in an undergraduate medical curriculum: Learning from experience. South African Journal of Higher Education, 16(1):113-121.

Biggs, J. 1999. Assessing for quality learning. Abstract from plenary session at AAHE's 1999 Assessment Conference. 13-16 June. Denver, Colorado. In L Suskie (ed.), *Assessment to promote deep learning*: 9-18.

Blaxter, L, Hughes, C & Tight, M. 1996. How to research. Buckingham: Open University Press.

Bouma, GD & Atkinson, GBJ. 1995. A handbook of social science research. Second edition. Oxford: Oxford University Press.

Bruce, C. 1996. Supervising literature reviews. In O Zuber-Skerrit & Y Ryan, *Quality in postgraduate education*. London: Kogan Page: 143-155.

Byett, JH. 1999. Packaging and printing diploma curricula development for a technically oriented diploma. South African Journal of Higher Education, 13(3):186-192.

Cape Technikon. 2002. *Mission Statement*. [online] Available at <a href="http://www.ctech.ac.za/manag/mission.html">http://www.ctech.ac.za/manag/mission.html</a> [Accessed: 08/04/02].

Cape Technikon. Department of Institutional Research and Planning. 2002. Faculty statistics. Cape Town: Cape Technikon.

CDE Round Tables. 2000. *The future of South African universities: What role for business?* [online] Available at: <a href="http://www.cde.org.za/round">http://www.cde.org.za/round</a> pt.htm [Accessed: 13/12/2000].

Chapple, M & Tolley, H. 2000. Embedding key skills in a traditional university. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 67-76.

CHE: see Council on Higher Education.

Clanchy, J & Ballard, B. 1995. Generic skills in the context of higher education. *Higher Education Research and Development*, 14(2):155-166.

Clarkeburn, H, Downie, R, Reid, N & Beaumont, E. 2000. Teaching biology students transferable skills. *Journal of Biological Education*, 34(3):133-143.

Council on Higher Education (CHE). 2000. Towards a new higher education landscape: Meeting the equity, quality and social development imperatives of South Africa in the 21<sup>st</sup> century. Pretoria: Council on Higher Education.

Creswell, JW. 1994. Research design: Qualitative and quantitative approaches. Thousand Oaks: Sage.

De la Harpe, B & Radloff, A. 2000. Helping academic staff to integrate professional skills. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 165-174.

De la Harpe, B, Radloff, A & Wyber, J. 2000. Quality and generic (professional) skills. *Quality in Higher Education*, 6(3):231-243.

Denscombe, M. 1998. The good research guide: for small-scale social research projects. Buckingham: Oxford University Press.

Department of Education (DoE). 1997. Education White Paper 3: A programme for higher education transformation. Pretoria: Government Printer.

Department of Education (DoE). 2001. *National plan for higher education in South Africa*. [online] Available at: <a href="http://education.pwv.gov.za/DoE">http://education.pwv.gov.za/DoE</a> sites/Higher [Accessed: 06/03/2001].

Department of Education (DoE) & Department of Labour (DoL). 2002. Report of the study team on the implementation of the National Qualifications Framework. April. Pretoria: Government Printer.

DoE: see Department of Education.

DoE & DoL: see Department of Education & Department of Labour.

EASA: see Education Association of South Africa.

Edith Cowan University. 2001. *Generic skills in higher education*. [online] Available at: <a href="http://www-chs.ecu.edu.au/org/tlo">http://www-chs.ecu.edu.au/org/tlo</a> [Accessed: 11/09/2001].

Education Association of South Africa (EASA). 2001. Contrasting views underlying alternative paradigms. Conference, University of Port Elizabeth. January.

Education and Professional Development (EISD). 1999. *Key skills in higher education*. [online] Available at: <a href="https://www.ucl.ac.uk/epd/papers/keyskills">www.ucl.ac.uk/epd/papers/keyskills</a> [Accessed: 05/12/2001].

Edwards, H. 2002. Quality and academic programmes. Research and development in higher education, (25): 229-237.

EISD: see Education and professional development.

Eliot, TS. 1963. Collected poems:1909-1962. London: Faber and Faber.

Entwistle, N. 2000. Promoting deep learning through teaching and assessment. Abstract from AAHE's 2000 Assessment Conference. 13-16 June. Charlotte, North Carolina. In L Suskie (ed.), Assessment to promote deep learning: 65-68.

Fallows, S & Steven, C. 2000. The skills agenda. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 17-32.

First-year intake up by some 14%. 2002. Bulletin - Cape Technikon Staff Newsletter, 11 March, 1.

Fourie, M & Hay, D. 2000. Policy into practice: Planning an instructional programme within the NQF. South African Journal of Higher Education, 14(1):196-204.

Gevers, W. 1999. The NQF in Higher Education. Policy, premises, prices and possible progress. Centre for higher education transformation. [online] Available at: <a href="http://www.chet.org.za/debates/nqf2.html">http://www.chet.org.za/debates/nqf2.html</a> [Accessed: 05/12/2000].

Gibbons, M. 1998. *Higher education relevance in the 21<sup>st</sup> century*. 5-9 October. Paris: Unesco: The World Bank: 1-21; 58-62.

Giddens, A. 2000. The great globalisation debate. As reported by T. Boas. Carnegie Endowment for International Peace. [online] Available at: <a href="http://www.cei.org/files/events/giddens.asp">http://www.cei.org/files/events/giddens.asp</a> [Accessed: 6/3/2001].

Gnanam, A. 2000. Core competency and higher education. South African Journal of Higher Education, 14(2):147-151.

Government Gazette. 1997. SAQA: Draft regulations governing the activities of NSBs. No. 17970, 9 May.

Grové, C. 1999. The transformation of education through the fifth wave of the industrial revolution and beyond. Paper presentation, Millennium Minds 99 Conference. [online] Available at: http://archive.wcape.school.za/mm99/cd/conf99/proceedings/86 [Accessed: 13/12/2000].

Gultig, J. (ed.). 1997. *Understanding outcomes-based education. Knowledge, curriculum and assessment in South Africa: Learning guide.* Pretoria: SAIDE and the National Department of Education.

Harvey, L. 1999. New realities: the relationship between higher education and employment. Keynote presentation at the European Association of Institutional Research Forum. Lund, Sweden. August 1999.

Holmes, L. 2000. Questioning the skills agenda. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 201-216.

Jacobs, GJ. 1999. Outcomes-based university education: do students really want to be competent? South African Journal of Higher Education, 13(2):135-140.

Kapp, CA. 2000. Paradigms and leadership. Leadership in education. University of Stellenbosch: 49-70. [Unpublished document].

Kok, N. (ed.). 1999. Cape Technikon fact book: 1998/99. Cape Town: Cape Technikon.

Kraak, A. 1997. Globalisation, changes in knowledge production and the transformation of higher education. In N Cloete, J Muller, MW Makgoba & D Ekong (eds), *Knowledge identity and curriculum transformation in Africa*. Cape Town: Maskew Miller/Longman: 51-78.

Kruss, G. 2002. Employment and employability: Expectations of higher education responsiveness. CHE colloquium, 27-28 June.

Laughton, D & Montanheiro, L. 1996. Core skills in higher education: The student perspective. *Education and Training*, 38(4):17-24.

Leaming, DR. 1998. Academic leadership. Bolton: Anker.

Leckey, JF & McGuigan, MA. 1997. Right tracks – wrong rails: The development of generic skills in higher education. *Research in Higher Education*, 38(3):365-377.

Malherbe, R & Berkhout, S. 2001. The national qualifications framework and the unconstitutional limitation of academic freedom. *South African Journal of Higher Education*, 15(2):62-72.

McKenzie, AD, Morgan, CK, Cochrane, KW, Watson, GK & Roberts, DW. 2002. Authentic learning: What is it, and what are the ideal curriculum conditions to cultivate it in? *Research and Development in Higher Education*, (25):426-433.

Middlehurst, R. 1993. Leading academics. London: SRHE.

Miles, MB & Huberman, AM. 1994. *Qualitative data analysis*. Second edition. Thousand Oaks: Sage.

Monks, K. 1995. Combining academic rigour and transferable skills: A business degree for the 1990s. *Education and Training*, 37(1):17-21.

Mouton, J. 2001. How to succeed in your master's and doctoral studies: A South African guide and resource book. Pretoria: Van Schaik.

Mummery, J. 2002. Facilitating critical thinking in an online environment. Research and development in higher education, (25):465-471.

National Council on Higher Education (NCHE). 2000. *The national and global context of higher education*. [online]
Available at: <a href="http://www.hsrc.ac.za/nche/final/tg2/chap">http://www.hsrc.ac.za/nche/final/tg2/chap</a> [Accessed: 13/12/2000].

NCHE: see National Council on Higher Education.

Nduna, JN. 2000. Environmental education for sustainable communities by adult practitioners in a black urban community. Unpublished PhD dissertation, University of Stellenbosch, Stellenbosch.

Northern Kentucky University. Curriculum Committee. 2002. General education model: Statement of purpose and goals. April 4.

Nunan, T, George, R & McCausland, H. 2000. Implementing graduate skills at an Australian university. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 57-66.

O'Brien, K. 2000. Ability-based education. In S Fallows & C Stevens (eds), *Integrating key skills in higher education: Employability, transferable skills and learning for life*. London: Kogan Page: 33-46.

Oliver, R & McLoughlin, C. 1999. Using web and problem-based learning environments to support the development of key skills. ASCILITE Conference proceedings.

Oxford advanced learner's dictionary. 1993. Fourth edition. Oxford: Oxford University Press.

PE Technikon. 2002. Internet home page. [online] Available at: <a href="http://www.petech.ac.za/new">http://www.petech.ac.za/new</a> [Accessed: 02/09/02].

Preece, J. 1999. Making the curriculum culturally relevant through a higher education core skills framework. *South African Journal of Higher Education*, 13(1):89-94.

SAQA: see South African Qualifications Authority.

Scott, P. 1997. The crisis of knowledge and the massification of higher education. In R Barnett & A Griffin. (eds), *The end of knowledge in higher education*. London: Cassell.

Scouller, K. 1998. The influence of assessment method on students' learning approaches: multiple choice question examination versus assignment essay. *Higher Education*, 35: 453-472.

Senge, P. 1993. The fifth discipline. London: Century Business.

Sheal, PR. 1992. How to develop and present training courses. London: Kogan Page.

Snoke, R, Underwood, A & Bruce, C. 2002. An Australian view of generic attributes coverage in undergraduate programs of study: An information systems case study. *Research and Development in Higher Education*, (25):590-598.

Soontiens, W & De la Harpe, B. 2002. Professional skills development in Australian universities: Is there a bias? *Research and Development in Higher Education*, (25):599-608.

South African Qualifications Authority. 1997. SAQA Bulletin, 1(1), May/June.

Sparrow, H & Sharp, S. 2002. Quality course development through a central teaching and learning project: Lessons from a project to embed graduate attributes in undergraduate programs. *Research and Development in Higher Education*, (25):618-625.

Steven, C & Fallows, S. 1998. Enhancing employability skills within higher education: Impact on teaching, learning and assessment. Paper Presentation at *Higher Education Close Up*, International conference at University of Central Lancashire. Preston, England. 6-8 July.

Subotzky, G. 2000. *Globalisation and Higher Education*. CHET: Transformation Debates. [online] Available at: http://www.chet.org.za/debates/SanLameer/subotzky.html [Accessed: 11/12/2000].

Tait, H & Godfrey, H. 1999. Defining and assessing competence in generic skills. *Quality in Higher Education*, 5(3):245-253.

University of Stellenbosch. Faculty of Education. 1999. Workshop on OBE. August.

Van Schalkwyk, S. 2001. At the core of the transformation process: A satisfied academic? M Phil studies, University of Stellenbosch. [Unpublished research].

Wits Technikon. 2002. *Our philosophy*. [Online] Available at <a href="http://www.twr.ac.za/philosophy.html">http://www.twr.ac.za/philosophy.html</a> [Accessed: 19/02/02].

World declaration on higher education for the twenty-first century: Vision and action. 1998. As adopted by the World Conference on Higher Education. [online] Available at: http://www.unesco.org/education/eduprog/wche/declaration [Accessed: 29/09/2000].

## APPENDIX A

### **INTERVIEW SCHEDULE**

Each interviewee will be given a copy of SAQA's critical cross-field outcomes as well as the developmental outcomes prior to the commencement of the interview.

- 1. Thank you for giving me your learner guide to use in my research. When did you re-design your guide according to OBE and SAQA requirements?
- Were you given any assistance in this process?
  - 2.1 If yes, what sort of assistance?
  - 2.2 If no, how did you go about the re-design process?
- 3. What do you know about SAQA's critical cross-field and developmental outcomes? Has this changed the way you teach? (planning, methodology or assessment?)

(The following 3 questions will be adapted according to what was observed by the researcher in the learner guides)

- 4. You have:
- listed all the critical cross-field and developmental outcomes
- > some of the critical cross-field and developmental outcomes
- > not listed any of the critical cross-field or developmental outcomes
- listed some outcomes under the heading 'critical outcomes' that do not relate to those laid down by SAQA

could you explain your rationale behind this?

- You have:
- listed specific learning events to develop certain of the critical cross-field outcomes
- not indicated any specific learning event that will develop any of the critical cross-field outcomes

could you explain why you have done so?

- 6. You have:
- listed specific forms of assessment to evaluate the extent of the development of certain/all of the critical cross-field outcomes
- > not indicated any specific form of assessment to evaluate whether the critical cross-field outcomes are being developed or not.

could you comment?

 As an experienced higher education practitioner, do you believe it is feasible to expect lecturers to take responsibility for developing such generic skills. Please motivate your answer.

(The following 3 questions will only be asked of those whose answer to Q7 was positive)

- If you are endeavouring to enhance the generic skills of your students, please share some specific learning events where such development was encouraged and how they have been received.
- 9. What other techniques or approaches do you think could be incorporated into the programme that you offer that might further contribute to the development of generic skills /SAQA's critical cross-field and developmental outcomes?
- 10. Please share some thoughts on the assessment of the extent of the development of these

skills in the learner.

- 11. In Australia they have developed an instrument to assess the generic skills of students do you think that such assessment might assist you in planning your study programme?
- 12. Do you believe that further training or perhaps attending a workshop might further facilitate your integration of the critical cross-field outcomes in your programme?

Thank you.

## APPENDIX B

## **EXAMPLE OF TRANSCRIPT OF INTERVIEW**

1. Thank you for giving me your learner guide to use in my research. When did you redesign your guide according to OBE and SAQA requirements?

I did not change it to please 'them', I changed it because I wanted to. I first started with the BTechs. I wanted to make the students aware that they cannot simply receive, the higher one goes, for example, with your M studies, you have to give something back to the community. So I wanted to prepare the students to accept the responsibility to take responsibility for what they are doing. I then saw that what SAQA required actually fitted in well with what I wanted to do and then I brought it in with the undergraduate students.

My approach in class has changed considerably as well. In the past I provided considerable detail, but now I simply provide a framework and the students have to go and research to fill in the gaps.

Most of the changes to the guide were introduced at the start of 2001, but I am still investigating what works and what doesn't. But it focuses on creating a perspective, this is where we are at and then he must move work from there with an awareness of where he is at, where he has come from and where he is heading in terms of the course as whole.

If it is going to work or not, I can' say. Many students struggled last year, so I will have to monitor what happens this year.

Were you given any assistance in this process?

No, it was common sense. At some stage we did get an obscure message relating to these issues, but I still don't know what are specified outcomes and all those sort of things, it's all just been my own logical thinking.

3. Before I went through the list of critical cross-field outcomes with you today, were you aware of their existence?

No.

4. What do you know about SAQA's critical cross-field and developmental outcomes? Has this changed the way you teach? (planning, methodology or assessment?)

Not asked. See responses for 1.

You have actually articulated critical cross-field outcomes in your learner guide, this is contrary to your earlier responses.

Purely co-incidence.

6. What then brought you to an understanding that the three items you have listed as cco's are the most important within the context of your subject?

Logical thinking. You expect a student to build a solid foundation for a research project. He must find the information and then make decisions based on what he has found. I don't know whether this is the right way to approach it, but it is the way one does research.

### 7. What do you do specifically then to develop these investigatory skills?

Give them research projects, and if they struggle we discuss in class what they found problematic and then let those who found it easier share their experiences so that they can learn from one another. Let them work in groups. This happens mostly in the practical classes. (3 theory and 2 practical)

 As an experienced higher education practitioner, do you believe it is feasible to expect lecturers to take responsibility for developing such generic skills. Please motivate your answer.

Yes, even if it isn't my task, I do think it is my responsibility. The HR lecturers decided about 5/6 years ago that we were going to get the students talking in class. Even if they weren't proficient. He must be able to stand up in a group of people and make himself heard. Communication is a key factor in HR. We start with this in the first year and even those who are shy or for whom English is a second language start catching up by the second and third year.

We try to encourage these skills in the classroom, but I don't have the knowledge to assist students with, for example communication skills – this is not in my field.

9. Obviously then, there is a potential gap as you feel that many of these skills are being developed per chance in the classroom, but how can we go about ensuring that the process is more structured, addressing the needs of all students and assessing their development?

In my case, I simply did not know about these outcomes. Now that I am more aware, I will try to build them into my course. And I think we could do with some training. Perhaps a short course that focuses on these issues. We can learn from one another.

10. In Australia they have developed an instrument to assess the generic skills of students – do you think that such assessment might assist you in planning your study programme?

Yes, it would help me to position my course to focus more on where the learner is. It is also to be hoped that as the schooling system clicks in with OBE, the students will be more prepared when they arrive at tech.

Thank you.

## APPENDIX C

## **FOCUS GROUPS**

#### (Wednesday, 20 March 2002)

- 1. Obtain names of group members
- 2. Give each group member a copy of the critical cross-field outcomes and discuss

#### Discussion:

- Do you think it is more important to acquire academic knowledge or critical outcomes?
- 2. Which of these do you believe will help you most in your career one day?
- 3. What do you think your lecturers believe?
- 4. Going through the outcomes, can you give examples of where you were given the opportunity to develop the outcome?
- 5. Going through the outcomes, can you give examples of where you were given the opportunity to demonstrate the outcome?
- 6. How do you prepare for an exam or test?
- 7. Have any of your lecturers ever discussed the critical outcomes with you?
- 8. What sort of activities do you enjoy most in class?
- 9. Which do you enjoy the least?
- 10. Whose responsibility is it to develop your critical skills?
- 11. Do you think it would help it there was a separate course to develop these skills?
- 12. What do you think lecturers can do to develop your critical skills?

## APPENDIX D

## EXAMPLE TAKEN FROM TRANSCRIPT OF FOCUS GROUP

(note: Q = interviewer/questioner; R = responses)

#### **GROUP 2**

- Q. If you could have a look at this list, which ones do you think could be most important to you? We don't have time to look at all individually, so which ones do you think would be most important in terms of human resources?
- R Well, specifically working in a group would be most important to all of us and if I can think of communication I think it would the inter-cultural aspect as well.
- Q OK other comments
- R I agree with her, in a job we will spend a lot of time working in groups. At tech we are in any case often put into groups and with different cultures.
- Q Have you found that the subjects you completed last year were very removed from one another?
- R No, they were very integrated
- Q Give an example
- R Certain experiential models that we learned in personnel we also learned in training. They tried to get the same information across to us in different ways. So [you] might not understand a thing and then you walk into the next class and say 'ok, I know that' and that's good.
- R Also with our business project, the whole business form, the letters and things that we did in communication we could use that in our business project and various projects that we did. At least you know this is the way to do it, even something as simple as bibliographies. You think you are doing it right and then you see ok I was actually doing it wrong, but then at least you don't get penalized again because you learnt it in communication and you can use it in whatever subject you need it then. Also when we do presentations for our other subjects.
- Q Were you actually given input on presentation skills in any of your other subjects other than communication?
- R In training we were given some information.
- I want you to think about something for a moment. If you are given an assignment that requires you to work in groups, do you think the mere fact of being in the group makes you more capable in group dynamics? Do you think that if you get a good mark for the assignment, you were an effective group?
- R Yes, because when I go into a group I've got my ideas and then Carmen comes with her ideas and if I am not prepared to listen to her ideas then there's no way it's going to work so we are forced to listen to other ideas. I think it's very important that we learn to work through something to get to the end.
- What about the groups that didn't work. Perhaps there are groups that did not get a good mark? What about their group work skills? If they had to do a group task again have they learnt something?

- R I think maybe they look at the work they did so badly and are motivated to next time do better.
- R Most of the time when it's a situation like that then either one person was taking over the group, saying I know about this topic and that's it. But when they get the marks back then they like say well what can we do, how can we improve.
- Q What about the weak student? What are her/his options?
- R I think I am talking a lot, but when you get into a group you usually find there is one person who will motivate the group and encourage that weak person to talk. And the lecturers and the tutors usually go around and I like say, Carina, what do you think and try and get that person to talk, and encourage that person and I think the whole team should like look at the person and say, I like what you say and work with that person and even if they are shy, they will eventually feel a part.
- R I think it depends on the situation. Obviously if you are in a group you will observe and see how others do things if you are not sure. Because you may be scared if you are not sure your opinion will match up to theirs because you are not sure about your education level and [whether] your background is up to theirs.
- Q OK, let's have a look at some of the other outcomes listed here. We have looked at 2, 5 and 6, but let's have a look at no 1. To what extent do you think that the way your classes or programmes are presented at the moment encourages you or gives you opportunity to solve problems or to think creatively or critically?
- R In our projects. We have to plan and think creatively as to how we are going to go about preparing them.
- R And in personnel, we deal with this one topic and then maybe, we have to do a one-minute presentation on it. Like with production. I asked the lecturer yesterday, why is our answers never good enough for you and he said it's because he wants us to challenge us to work on it and to think about it more and to think critically and to see that this is linked to that and so on. Because a production department cannot work on its own you are going to need a finance department and a human resources department. So I think that is one example he's asking us questions all the time.
- Q Other examples?
- R In stats. All the time. We are given a bit of theory and then we are given problems to solve immediately.
- I am assuming that a lot of what you are talking about is taking place in the practical classes, would that be correct?
- R No, we don't even have practical for personnel this happening in the theory class where we are all together, about 150 in the class.
- Q Do you still have any classes where you walk in and you simply have a lecture with no interaction?
- R Only with the new lecturer in finance, but he probably doesn't know yet how we do things.
- R But he does give you examples and he does ask questions and he offers to help after class.
- Q How important is it for you in terms of your own preparation that you know whether or not a particular task is for marks or not, let's be honest here.
- R No, if it's not for marks, you say I've got too many other things so I am not going to worry about that. You prepare for marks, you want to get good marks.

- R Like the other day we got to class and we had not prepared for a particular thing but then we realized it was for marks so we said well we've got to get something together quickly and we did it. Then later we heard it wasn't for marks, but by then we'd already done it so we learnt something and we wouldn't have if we had known it wasn't going to be for marks.
- When you get group projects, are you given marks for the extent to which you worked in a group effectively or are you just given a final mark for the end product?
- R Just for the final produce. Last year we had a group project for business. But there were six of us in the group, but no-one did what they were supposed to do and at the last minute, Jenine and I did everything and we got a really good mark. But we were allowed to allocate marks in the group so if you thought a certain person had worked really hard you could add a mark, but if they didn't you could deduct a mark. I think that is a good way of doing it.
- R Also what we do is give each person a task and her name is next to that task so she knows she is going to get a mark based on what she has done.
- R If we have someone in the group who is not doing what they are supposed to do it is better to encourage them than to take away marks. Help them and show them what to do, sometimes they just don't know. It's better than we push them out and make them feel that they are not doing any work. But our groups at the moment are not working like that. They just say give them less 10%, but I think we should help and show them there's a step one, step two, step three and step four because there is nothing worse than being in a group and they give you a bad mark, because that could influence you not being promoted to the next year. If you don't get a project mark you don't get a year mark and I think that it's extremely unfair.
- If you look at the critical outcomes, how seriously do you think your lecturers take the responsibility of developing these skills in you guys? Or, to what extent do you think they focus on content or on you as a learner?
- R 90% us and 10% content.
- R No, not all the lecturers. Some of them will ask you if you understand and if you say no, they say 'ask a friend'.
- R I think they are very concerned about us. Last week [we] wrote a class test but many weren't in class so he said they could write it this week instead.

## APPENDIX E

## **SURVEY**

## Dear 2<sup>nd</sup> year Human Resources Management Student

As you know, it is part of the Cape Technikon's mission to provide high-level career-focused education that will not only produce graduates who will meet the needs of industry, but will also contribute to your full personal development. For this reason, I am currently researching the extent to which the development of certain key skills is being provided for in our study programmes.

I need your assistance in conducting this research and would, therefore, appreciate it if you could complete the attached questionnaire. Your answers will be treated in the strictest confidence. Please do not leave out any questions. Remember, **this is not a test and there are no right and wrong answers.** If you are uncertain about a question, ask your lecturer to assist you.

Your student number:	
Your gender:	

As a future Human Resources practitioner, list in order of importance, the five skills that you think you will need to be effective in your job.

1.

2.

3.

4.

Rate the extent to which each of the following statements is true of your own 4. situation at the present time, by drawing a cross underneath one of the numbers (1 to 5) next to each statement.

Use the following	scale for	your answers:
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- Always true
   Often true
- 3. Sometimes true
- 4. Seldom true
- 5. Never true

		1	2	3	4	5
		Always	Often true	Sometimes	Seldom true	Never true
4.1	My lecturers create opportunities for me to participate during classes					
4.2	We spend more time in class listening to a lecture than discussing the work					
4.3	I prefer attending large classes (more than 30 students) rather than smaller groups					
4.4	My lecturers show how my different subjects are all linked to one another					
4.5	My lecturers use examples from industry to explain the theory discussed in class					
4.6	I learn more from doing a research project that from preparing to write an exam					
4.7	I find it easier to prepare for multiple-choice questions than for long questions					
4.8	My lecturers are more concerned about me as a person than about the amount of subject knowledge I can obtain					
4.9	My exams at the end of 2001 required me to apply what I had learnt during the year					
4.10	My practical assignments challenge me to think creatively					
4.11	My lecturers discuss potential job and entrepreneurial opportunities in class					
4.12	When I do an assignment in a group I usually produce a better result than when I work on my own.					
4.13	I get frustrated when I know an answer to a question, but cannot express myself clearly					

Carefully read through the following list of skills:

5.

ctivity that you believe led to your developing any of the skills listed about	Identify and solv	ve problems	
Collect, analyse and organise information  Communicate effectively both orally and in writing  Use technology effectively  Explore links between your different subjects  Participate in community activities  Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classroctivity that you believe led to your developing any of the skills listed abolease answer as descriptively as you can and state which skill(s) you fee	Work effectively	in a team/group member	
Communicate effectively both orally and in writing  Use technology effectively  Explore links between your different subjects  Participate in community activities  Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classroctivity that you believe led to your developing any of the skills listed abelease answer as descriptively as you can and state which skill(s) you fe	Manage yoursel	If and your activities responsibly	
Use technology effectively  Explore links between your different subjects  Participate in community activities  Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classroctivity that you believe led to your developing any of the skills listed abolease answer as descriptively as you can and state which skill(s) you fe	Collect, analyse	and organise information	
Explore links between your different subjects  Participate in community activities  Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro ctivity that you believe led to your developing any of the skills listed abordease answer as descriptively as you can and state which skill(s) you fee	Communicate ef	ffectively both orally and in writing	
Participate in community activities  Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro civity that you believe led to your developing any of the skills listed abordease answer as descriptively as you can and state which skill(s) you fee	Use technology	effectively	
Be sensitive to other cultures  Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro ctivity that you believe led to your developing any of the skills listed aborlease answer as descriptively as you can and state which skill(s) you fe	Explore links bet	etween your different subjects	
Appreciate beautiful things  Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro ctivity that you believe led to your developing any of the skills listed aborlease answer as descriptively as you can and state which skill(s) you fe	Participate in co	ommunity activities	
Explore career opportunities  Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro ctivity that you believe led to your developing any of the skills listed abordease answer as descriptively as you can and state which skill(s) you fe	Be sensitive to o	other cultures	
Utilise entrepreneurial opportunities  In the space provided below, describe any ONE learning event or classro ctivity that you believe led to your developing any of the skills listed aborable answer as descriptively as you can and state which skill(s) you fee	Appreciate beau	utiful things	
n the space provided below, describe any ONE learning event or classroctivity that you believe led to your developing any of the skills listed above answer as descriptively as you can and state which skill(s) you fe	Explore career o	opportunities	
ctivity that you believe led to your developing any of the skills listed above lease answer as descriptively as you can and state which skill(s) you fe		neurial opportunities	
	n the space pro- ctivity that you lease answer a	believe led to your developing any of the skill as descriptively as you can and state which sk	ls listed abo
	n the space pro- ctivity that you lease answer a	believe led to your developing any of the skill as descriptively as you can and state which sk	ls listed abo
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	n the space pro- ctivity that you lease answer a	believe led to your developing any of the skill as descriptively as you can and state which sk	ls listed abo
	the space pro- ctivity that you lease answer a as(were) devel	believe led to your developing any of the skill as descriptively as you can and state which sk loped during this activity.	ls listed abo
	the space pro- ctivity that you lease answer a as(were) devel	believe led to your developing any of the skill as descriptively as you can and state which sk loped during this activity.	ls listed abo
	the space pro- ctivity that you lease answer a as(were) devel	believe led to your developing any of the skill as descriptively as you can and state which sk loped during this activity.	ls listed abo
	the space pro- ctivity that you lease answer a as(were) devel	believe led to your developing any of the skill as descriptively as you can and state which skill loped during this activity.	ls listed abo

 Consider the skills once again and then select one or more assessment methods that could be used to determine the extent to which you have developed these skills.
 Indicate your choice by placing a cross (x) beneath the relevant method(s).

	Case study	Research project	Role play	Multiple-choice questions	Group exercise	Portfolio	Written exam or test	Oral exam or test
Identify and solve problems								
Work effectively in a team/group member								
Manage yourself and your activities responsibly								
Collect, analyse and organise information								
Communicate effectively both orally and in writing								
Use technology effectively								
Explore links between your different subjects								
Participate in community activities								
Be sensitive to other cultures								
Appreciate beautiful things								
Explore career opportunities								
Utilise entrepreneurial opportunities								

Thank you for taking part in the survey!

# **APPENDIX F**

# Responses received to Question 3. (n=61)

Skills deemed important	No of responses per ranking						
	1	2	3	4	5	Total	
Communication (oral and written)	36	69	2	3	3	50	
Listening	1	9	6	2	3	21	
Creative thinking			3		2	5	
Leadership	3	10		1	5	19	
Interpersonal skills	7	6	4	2	3	22	
Using technology	2	2	4	2	4	14	
Sensitivity to other cultures	2	2	3	2	5	14	
Identify and solve problems	2	2	8	8	4	24	
Managerial skills	2	4	4	7	1	18	
Group work skills	4		2	4	3	13	
Managing conflict	1	2	3	4		10	
Job knowledge	1	2	2	2	1	8	
Manage yourself		1	1	4	4	10	
Analytical skills		4	1	2		7	

## **APPENDIX G**

# Responses received to Question 4 (n=61)

Statements listed				3	4	5
		Always true	Often true	Sometimes true	Seldom	Never true
4.1	My lecturers create opportunities for me to participate during classes	31	27	2	1	
4.2	We spend more time in class listening to a lecture than discussing the work	2	11	36	6	6
4.3	I prefer attending large classes (more than 30 students) rather than smaller groups	3	6	15	17	20
4.4	My lecturers show how my different subjects are all linked to one another	10	22	15	13	1
4.5	My lecturers use examples from industry to explain the theory discussed in class	27	23	11		
4.6	I learn more from doing a research project that from preparing to write an exam	16	21	15	7	2
4.7	I find it easier to prepare for multiple-choice questions than for long questions	10	9	14	15	13
4.8	My lecturers are more concerned about me as a person than about the amount of subject knowledge I can obtain	5	2	22	19	13
4.9	My exams at the end of 2001 required me to apply what I had learnt during the year	39	8	8	5	1
4.10	My practical assignments challenge me to think creatively	37	17	6		1
4.11	My lecturers discuss potential job and entrepreneurial opportunities in class	5	17	23	14	2
4.12	When I do an assignment in a group I usually produce a better result than when I work on my own.	6	13	19	12	11
4.13	I get frustrated when I know an answer to a question, but cannot express myself clearly	27	16	11	7	

## **APPENDIX H**

# Summary of responses received to Question 5 (n=61)

Skill	Communicate effectively orally and in writing	Sensitivity to other cultures	Using technology effectively
How was it developed	* Practising for presentations * Communication in English course	* Group cultural assignment (and other assignments) *role play on stereotyping	* Projects and presentations (PowerPoint) *End user computing course
Skill	Work effectively in a team	Identify and solve problems	Exploring links between subjects
How was it developed	* group tasks/assignments/ presentations * developed leadership skills by being required to take control * conflict resolution	* Brainstorming during group assignments * Preparing for role plays which would explain certain key concepts	* lecturers encouraged using knowledge from other courses in completing tasks
Skill	Explore career opportunities	Manage yourself and your activities responsibly	Collect, organise and evaluate information
How was it developed	* Assignment on HIV/AIDS * community involvement	* Juggling academic workload	* Assignments, projects, portfolios
Skill	Use entrepreneurial opportunities	Appreciate beautiful things	
How was it developed	* Business management project (business plan) * Encouraged in amost courses *Stall on market day	* while doing the training presentation (student did not explain how) * Cultural assignment	