

A QUALIFICATION STRUCTURE FOR UNIVERSITIES IN SOUTH AFRICA

Report 116

March 1995

PREFACE

At its meeting of 19 March 1993 the Universities and Technikons Advisory Council (AUT) noted that - .

- (a) developments had taken place with regard to various issues which were not reflected in the policy document A Qualification Structure for Universities in South Africa (NATED 02-116 (89/01)) (hence "document"); universities were experiencing problems with the implementation of some of the guidelines; and various requests had been received for the revision of the document; and
- (b) the document needed technical revision and updating.

The AUT decided that the document should be revised and appointed a Working Group for this purpose. The Working Group consisted of the following members (after co-optation):

Dr G A Niebuhr (Department of Education
(Chairperson)
Prof A J Viljoen (Vice-Rector, PU for CHE,
Representative of the CUP)
Prof W Gevers (Vice-Rector: University of Cape Town,
Representative of the CUP)
Dr D J J van Rensburg (Rector: Pretoria Technikon,
Representative of the CTP)
Dr R H Stumpf (President HSRC)*
Dr J G Pretorius (Department of Education)**
Dr J Vermeulen (Department of Education)

* Member of the Working Group by virtue of a decision of the AUT on 23 June 1994.

** Member of the Working Group by virtue of a decision of the AUT on 23 June 1994. Dr Pretorius acted as Chairperson at the last meeting of the Working Group on 24 February 1995.

Mr P Govender (ex: DEC:D)*
Mr J Arendse (Representative of ex: DEC:R)
Mr J Stronkhorst (Representative of DET)
Dr P S de Jongh (Department of Education)
Dr P E Beezhold (Department of Education)

Dr H C du Toit (Department of Education), who acted as secretariat of the Working Group, was responsible for the research and the compilation of the revised document.

The Working Group convened on 28 July 1993 and decided to obtain information from the universities regarding the policy document A qualification structure for universities in South Africa (NATED 02-116 (89/01)) by means of a questionnaire.

In the light of, *inter alia*, this feedback the document was revised at the meetings of the Working Group on 2 March 1994 and 18 May 1994 and was presented on 23 June 1994 to the AUT as a progress report. It was decided by the AUT to refer the document back to the Working Group for further adaptation after which it was sent via the CUP and CTP to all universities and technikons for comment.

In the light of these comments the Working Group further adapted the document at its meeting of 24 February 1995 and the document was presented to the AUT at its meeting of 23 March 1995.

* Later replaced by Mr I.A. Ismael (ex DEC:D).

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CHAPTER 1

INTRODUCTION

As a product of its context, the report A qualification structure for universities in South Africa (NATED 02-116 (89/01)) for a number of years exerted a guiding and stabilising influence on universities in South Africa. Its scope was not restricted to the universities as such, but it also served as a point of reference in the broader field of tertiary education on the basis of which other education sectors could position and establish themselves as far as their mission was concerned.

In recent years, however, tertiary education, and in fact education in general, has entered a dynamic transitional phase in which it is being fundamentally affected, apart from growth and development which is internal to the system itself, by the latest developments and challenges in the political, social, economic and scientific fields. The extent of these developments is such as to render a revision of the qualification structure for universities necessary.

The present uncertainty and instability which accompany these developments naturally present unique problems for the development of education policy in general and of a qualification structure for universities in particular, simply because a qualification structure is typically influenced by a wide variety of factors acting in concert. This could, in fact, give rise to questions as to the validity of the revision of the qualification structure for universities under such circumstances.

It could, however, be argued that education policy, precisely in order to be able to remain relevant and determinative,

should project future developments and accordingly establish structures and mechanisms that will take these developments into account.

It is in this spirit that this revision is being done in an endeavour to produce a concrete proposal which can serve as a point of departure for further developments.

The report comprises the following:

Chapter 2 discusses relevant factors for the development of a qualification structure for universities.

Chapter 3 develops criteria that are determinative for a qualification structure for universities.

Chapter 4 contains guidelines for degree structures.

Chapter 5 contains guidelines for diploma structures.

Chapter 6 contains a summary linking the proposed qualification structure (Chapters 4 and 5) to the criteria (Chapter 3).

As an aid to universities, the Annexure contains information on the evaluation of applications for the introduction of new programmes.

CHAPTER 2

FACTORS RELEVANT TO THE DESIGN OF A QUALIFICATION STRUCTURE FOR UNIVERSITIES IN SOUTH AFRICA

2.1 INTRODUCTION

The qualification structure of an education sector is typically linked to a variety of factors that have to be carefully considered in the development of such a structure. For example, a qualification structure for universities in South Africa should ideally propose a well-founded framework for university qualifications which reflects not only aims and considerations that are internal to the sector but also the broader educational, social and economic factors.

For example, the development of a qualification structure for universities cannot be seen as independent of the aims, content and functions of the tertiary education sector, and, more widely, of the education and training sector as a whole. In their turn, the aims, content and functions of the education and training sector must take into account the essential process of reconstruction and development that is taking place in South Africa at present and make a constructive contribution in this respect.

In this chapter, some of these factors are briefly discussed as they relate to the development of a qualification structure for universities in South Africa. These factors include aspects such as the following:

- * The aims of the education and training system;

- * the aims of the tertiary education system;
- * the internal structure and function of the tertiary education system;
- * vertical and horizontal access;
- * a national qualification structure;
- * programme types and designations;
- * personpower requirements.

2.2 THE AIMS OF THE EDUCATION AND TRAINING SYSTEM AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

The aims of the education and training system in South Africa can be briefly described as the general development of a good quality of education and training which could, as part of the process of reconstruction and development in South Africa, offer equal opportunities to all South Africans throughout their lives to acquire or improve knowledge, skills and values for the development of themselves, their culture, the economy and the country.

These aims must be reflected in and supported by a national, overarching qualification structure for education and training within which the qualification structures for the various education and training sectors are relationally interlinked (see 2.8 below).

As a component of such a national qualification structure, the qualification structure for universities must provide a framework for university qualifications within which the particular focus and aims of the university sector can find expression.

2.3 THE NATURE OF GOVERNMENT CONTROL OVER UNIVERSITIES AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

In the new education dispensation, the Minister of Education is responsible for norms and standards with regard to various key matters, which will probably include policy with regard to a qualification structure for universities. In addition, the central Department of Education is responsible for the executive functions with regard to universities and technikons.

The content of this framework of control will obviously have direct implications for the university sector and, among other things, for the development of its qualification structure.

In this respect, experience has shown locally as well as internationally that autonomy or managerial independence contributes largely to administrative efficiency. Autonomy in this context means that an institution must, first of all, be as independent as possible in the execution of its administrative functions, such as policy determination, organisation, staffing, funding, the determination of working procedures and the exercise of control.

Secondly, autonomy also includes control over the academic functions of institutions, which in ideal circumstances means that experts and specialists attached to subsystems and institutions are enabled to take a variety of academic decisions. In this way, decisions as to the specific nature and content of curricula, the method of teaching and the determination as to which people from an academic point of view fulfil the requirements for receiving and teaching in a subsystem or institution, are therefore primarily the responsibility

of the system and its institutions rather than of the Government.

The above-mentioned powers should, however, be exercised within broad parameters that are spelled out within a nationally determined and recognised education framework and should be supported by adequate funding by the Government.

Autonomy should, however, be closely bound up with accountability. In this context, accountability means that institutions should demonstrate to the Government and to their communities that they have acted responsibly within the parameters set for their functions by the Government and the specific institutional objectives that they have themselves formulated according to the needs of their clients.

Tertiary institutions should also enjoy a high degree of academic freedom, as is indeed guaranteed both in the former and in the present interim Constitution of the Republic of South Africa. This entails the intellectual as well as individual freedom of academics and students to research the truth and to make it known without hindrance but in a responsible manner.

Academic freedom and the academic responsibility of academics and institutions are essential to the continued viability, renewal and efficiency of individual institutions, but also of the system as a whole.

Such a scenario of the relationship of control between the Government and the universities implies that the Government merely provides a broad qualification structure for universities, containing, for example, broad parameters for types of qualifications, their

admission requirements, their content and mutual relationships.

Within this framework, individual universities must then by virtue of their autonomy develop their own qualification structure in accordance with their specific client group. In this way, an institution could avail itself of certain options made possible by the broad qualification structure, for example, concentrating on the offering of certain types of degrees and diplomas.

On its part, the Government would grant recognition to programmes developed within the parameters of the broad qualification structure by approving such programmes and, in so far as this is possible, making a financial contribution per student in respect of such programmes.

Universities would have the right, should they so desire, to present programmes for which the broad qualification structure does not provide, for example short courses or certificate programmes. In such cases, the Government would not, however, make a financial contribution to these programmes.

2.4 THE AIMS OF THE TERTIARY EDUCATION SYSTEM AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

The government should, on the one hand, ensure that the objectives of the various education subsectors correspond with the national objectives of the education system as a whole and with the process of reconstruction and development. This applies equally to the tertiary education system.

On the other hand, the government should ensure that the aims of the education subsectors are so interrelated as

to bring about maximum effectiveness in meeting the country's needs.

In relation to the tertiary education sector this means, *inter alia*, that the aims of the subsystems in this sector must be mutually coherent and complementary, and must also complement those of the pre-tertiary sector.

The aims or mission of the pre-tertiary sector could be described as follows:

The preparation of the child for life in his/her community and in the broader social context, amongst other things by providing learning opportunities that promote character building, the development of inherent potential, economic independence and good citizenship. In addition, the pre-tertiary education sector should also provide by means of Adult Basic Education for the basic learning requirements of the large numbers of adults needing such teaching in South Africa today.

Complementary to the aims of the pretertiary education sector, the primary aims of the tertiary education sector, within the framework of the process of reconstruction and development in South Africa, could be formulated as follows:

High-level personpower resource development and the provision of basic and applied scientific knowledge aimed at the economic, political, cultural and intellectual development of the country and its people.

Apart from this, tertiary institutions could also apply their special expertise to practical community services such as, amongst others, the establishment

of medical clinics and programmes directed at adult basic education and literary.

These aims must be pursued through an efficient, relevant and accessible system of a high quality, characterised by well-developed qualification structures, sufficient articulation channels, an adequate subsidy system and a supportive partnership between the various role-players.

2.5 THE INTERNAL STRUCTURE AND FUNCTION OF THE TERTIARY EDUCATION SYSTEM AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

2.5.1 Introduction

Within the framework of the general objectives for the tertiary education system mentioned above, national policy should also lay down clear guidelines regarding the internal structure and functions of the components of the tertiary system. It is obvious that the structural and functional set-up within the tertiary sector will have a direct impact on the aims and qualification structure of the various subsystems.

The following general remarks are relevant to the development of the internal structure and function of the tertiary education system:

- A holistic approach should be followed that takes into account the objectives of the education system in general and of tertiary education in particular.
- The components of the tertiary education system should make provision for a variety of emphases,

since the needs of the citizens of the country are frequently of a diverse nature.

- Although diversity has to be accommodated, a tertiary education system that simultaneously exhibits cohesion with regard to certain key aspects should be developed.

Although the present tertiary education system with its subsystems of universities, technikons and colleges does provide for the principle of diversity, it has in practice led to a considerable amount of compartmentalisation, a process that has been encouraged by a specific interpretation of the autonomy of institutions.

As a result of this, the present tertiary education system is to a large extent characterised by rigidity and inflexibility, with each subsector and institution largely working in isolation. This situation is not only inhibiting as regards the articulation of learners, but at the same time hampers the essential exchange of expertise.

As far as the internal division of the tertiary education sector is concerned, a fairly rigid differentiation was traditionally maintained between the functions and aims of the universities, the technikons and the colleges.

In terms of this differentiation, universities concentrate on the teaching and research of the basic or fundamental principles of science, *inter alia* with a view to the provision of high-level personpower.

Technikons concentrate on the application of scientific principles to practical problems and on technology, while the college system provides vocational education and training.

The philosophical basis for the above distinction rests to a large extent on the Main Report of the Commission of Inquiry into Universities (Van Wyk De Vries Report (1974)), which upholds the view that society can be divided into "spheres of relationships" that are independent of one another and have unique characteristics.

In these terms, universities constitute a "sphere of relationships" that sees the promotion and diffusion of basic or strictly academic knowledge as essential.

Technikons (or "colleges for advanced technical education", as they were known in 1974) constitute another "sphere of relationships" that is independent of the "university sphere". According to the Commission and later policy documents, the essence of technikons lies in their involvement in the development, implementation and practical application of technology.

Upon closer examination, however, it appears that concepts such as "basic science", "applied science" and "technology" are not only particularly problematical conceptually but cannot be used in practice to typify the difference between universities and technikons.

Although universities, for instance, largely concentrate on "basic" science, these principles and concepts are to a greater or lesser degree carried

through to the level of practice, depending on the specific nature and needs of the field of study concerned. Examples of this are studies in engineering and medicine, where the application of theory forms an essential part of the programmes.

Moreover, in the practice of science at universities, modern technology also plays an important role in the relevant areas of study. Departments such as Engineering, Architecture and Environmental Studies in fact see their primary function as teaching and research in the technological fields of study.

Furthermore, although technikons developed in the sixties as institutions with a focus on engineering and other technological subjects, they have expanded their role over the past decade to include other fields of study, such as business, commerce and the human sciences in general.

In principle, however, the division of the tertiary education system into three subsectors, each with its own focus, appears to be sound and congruent with the diverse personpower needs of the country. In addition, a comprehensive infrastructure has already been developed to support the function and objectives of these subsectors.

Five factors however seem to be of importance if a tripartite division of the tertiary sector, in some form or other, is maintained:

- First, it is clear that the definition of the function and objectives of universities, technikons and colleges will have to be refined;

- Secondly, provision will have to be made for adequate articulation channels through which learners can articulate both intra-sectorally and inter-sectorally;
- Thirdly, it is essential that a strong partnership be created between institutions in the field of tertiary education. Such cohesion must be manifested, *inter alia*, in the effective articulation of learners and also in regional co-operation agreements in respect of the exchange of expertise and staff and the presentation of programmes;
- Fourthly, quality enhancement and control mechanisms will have to be created and developed which will, in addition to institutional initiatives in this respect, promote standards at both the intra-sectoral and the trans-sectoral levels; and
- Fifthly, it will have to be accepted that, despite the difference in focus among the tertiary subsectors, a certain "grey area" has developed in practice, in which distinctions between the subsectors have begun to fade. Such shifts in focus are, however, normal in the course of the development of systems of education worldwide and South Africa is no exception in this respect.

In the light of the above, the functions and objectives of each of the tertiary education subsectors will be defined more exactly in the sections that follow. The purpose of allocating such functions and objectives is to establish certain directive principles that, bearing in mind the present educational and training requirements of the country, will be able to steer the academic activities of these sectors in a certain direction. The

qualification structures for the different subsectors would then have to reflect these functions and objectives.

In the final analysis, however, the motivation for these functions and objectives remains the requirements of the country and its people. These requirements constitute the final criterion for the allocation of academic responsibilities to academic institutions.

The fact that people's needs tend to be subject to constant change implies that the qualification structure of education sectors will have to be constantly adapted and updated.

2.5.2 The objectives and functions of the university and its qualification structure

As academic and scientific leaders in particular fields of education, universities in South Africa, like other leading universities throughout the world, have good quality practice of science as their chief academic objective. In both teaching and research as the main activities of the university, the focus falls on the fundamental or basic scientific principles and concepts underlying subjects.

In this respect, it is of particular importance that, in order to meet the demands of relevance, universities within the context of a developing country such as South Africa should pursue both long-term and short-term objectives through a deliberate and effective symbiosis of teaching and research.

In addition to the focus on basic principles and depending on the specific nature and needs of the subject in question, technology in the applicable areas of

research forms part of the field of study of the university and basic principles and concepts are applied in practice.

Although universities also undertake vocational training, it appears to be desirable that there not be a too restrictive vocational orientation of the curriculum in the career-based degrees. The focus should remain on the broad scientific principles of the various fields of study.

Recent literature in this regard has shown a certain degree of consensus internationally that a need will exist in the national economies in the 21st century for the training of high-level personpower able to think widely and innovatively over a spectrum of different disciplines.

It is becoming increasingly clear that engineers, for example, cannot function effectively without taking into account both the rapidly changing technology and the socio-political environment. This implies that, in addition to schooling in the broad engineering sciences, engineering education should include instruction in subjects such as economics, communication and the social sciences.

The same principle applies to traditional professional university education in fields such as architecture, medicine and industrial psychology, where a broad schooling in scientific principles in a particular field is desirable during the first three to four years.

In addition to the academic objectives of the university as set out above, these institutions also strive to broaden the cultural horizons of the students and to educate them to become persons who can think for

themselves, in their extra-curricular pursuits as well as within the framework of the curriculum.

Furthermore, many universities in South Africa have over the years used their specific expertise for practical community service and have launched numerous projects in this regard, for example the establishment of medical clinics and other extra-curricular activities. Although such involvement is commendable, it should not become the main focus of a university's activities.

Finally, if it is argued that universities should be attuned to the needs of the communities they serve, this implies that the specific aims of universities in South Africa may differ in terms of their areas of focus precisely because the communities they serve often differ greatly.

Each university should identify certain areas of focus, in close contact and in accordance with the needs of the specific community it serves as well as the national interest. In this regard, it is natural to accept that the subsidy formula should take into account the fact that universities may have different areas of focus.

As far as the qualification structure of universities is concerned, this implies that national policy in this regard should provide for a variety of programmes in which the diverse academic objectives of universities can be reflected.

This means, on the one hand, that the qualification structure should position universities in relation to other tertiary education institutions and, on the other hand, that a sufficient number of different programmes should be accommodated within the qualification structure to provide for the needs of the country.

Within the above objectives, the programmes of a university will exhibit certain characteristics. It is generally accepted that a scientific or academic discipline qualifies for study at university level when it complies with the following:

- (i) It relates to a definable field of study and investigation with its own intellectual problems and challenges, i.e. its own complex of actual and potential questions by which creative thinking is stimulated and a continuing process of focused research can be sustained;
- (ii) It rests on a framework of basic principles in terms of which the relevant field of study and investigation can be defined, problems can be set and findings can be systematically formulated;
- (iii) It already has a body of theoretical designs or scientifically founded generalisations that provide the investigator with the necessary intellectual orientation and in the light of which problems can be identified and research projects planned;
- (iv) It has been methodologically consolidated to such an extent that a minimum of inter-subjectively valid rules exist that can be followed and taught with regard to the procedures of data collection and processing and to the development, critical testing and organisation of explanatory insights;
- (v) It can depend for its viability as an independent academic discipline in all the above respects on recognition by and substantial contributions from a core group of academically accredited learned persons; and

- (vi) Owing to an identifiable need, it needs to be taught, practised and developed at university level. This need may be related to internal developments within the academic world itself, for example increasing specialisation in an established discipline, or to inter-, trans- or cross-disciplinary focusing on intertwined problem areas.

It may also relate to social developments, for example the differentiation of educational, technical, administrative, political or economic activities.

2.5.3 The function and objectives of the technikon and its qualification structure

Technikons concentrate on vocational training and technology. The objectives of a technikon are given as follows in the recently revised policy document Requirements for national instructional programmes at technikons (Report 150 (95/01)):

- Support and guidance towards greater maturity to students at the tertiary level; and
- The preparation of persons for the practice, promotion and transfer of technology within a particular occupation or industry. (p. 4)

According to this document, the latter objective, which relates to the specialisation by technikons in vocational education, requires that -

- instructional programmes be aimed at meeting the needs of the vocation/industry concerned; and

- up to at least National Higher Diploma and B Tech degree level, the greater part of all instructional programmes involve putting into practice existing knowledge, technology, results and formulas. (p. 5)

The introduction of B Tech degrees and the resultant postgraduate qualifications at technikons naturally have implications for the qualification structure at universities in that they bring about a repositioning as regards degree versus diploma qualifications.

Although universities traditionally also award diplomas, until recently the awarding of degrees was the sole right of the universities, while diplomas and certificates were awarded by technikons and colleges.

The right to award degrees was also linked to the stature of the universities in South Africa. The right of technikons to award degrees does not detract from this stature. However, this development should considerably enhance the stature of technikons.

The typification of the degrees awarded by technikons by affixing the abbreviation "Tech" behind the letter indicating the type of degree (i.e. B Tech, M Tech, etc.) is intended, in the first place, to distinguish between technikon and university qualifications and, secondly, to typify the content of these degrees to some extent.

2.5.4 The functions and objectives of the colleges and their qualification structure

The objectives of the colleges of education, nursing colleges, agricultural colleges and technical colleges (N4 to N6 programmes) (and possibly community colleges in one of their functions) should in the future remain that of vocational preparation. In this regard, colleges

should maintain and where necessary expand close contact with universities and technikons.

The qualification structure for the college sector (consisting of diplomas and certificates) should be linked and positioned in relation to that of the universities and technikons within a broader qualification structure (see 2.8 below).

2.6 ACCESS AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

2.6.1 Introduction

One of the greatest challenges in South Africa today is to develop an education system that provides adequate and equal opportunities for study for all South Africans. Since opportunities for study are so closely linked to the qualification structure of education institutions, for example with regard to the types of qualifications offered, the admission requirements, access and exit points, this challenge also has certain implications for the qualification structure of the various education sectors.

Access at the tertiary level can be defined in two ways:

Access on the vertical axis can, in the first place, be defined as the availability/"openness" of tertiary institutions to the flow of students from, amongst others, the pre-tertiary system and, secondly, as the opportunities for progress from less advanced to more advanced programme levels within the tertiary system, for example the articulation of a bachelor's degree acquired at one institution to an honours degree at another institution.

Vertical access affects, among other things, the academic preparedness of prospective students for tertiary study, the admission requirements of tertiary institutions and the details of the institutions' qualification structures.

On the horizontal axis, access refers to the availability/"openness" of tertiary institutions to learners who want to move/articulate from one tertiary institution to another.

The accessibility of institutions, both vertically and horizontally, is in a direct ratio to the degree of recognition granted in respect of the acquired knowledge, skills and experience of students. Universities traditionally do grant such recognition, but in many cases they do this on an individual and ad hoc basis.

2.6.2 Vertical access

As regards vertical access in respect of the flow of students from the pre-tertiary sector to the tertiary sector, there has up to the present not been equal access for prospective students.

What makes matters worse is the fact that there has been a sharp rise in the number of matriculants from the underprivileged communities who meet the minimum requirements for admission to tertiary study, as provided in the Joint Statute of the Universities.^{*} Many of these students are not, however, adequately

* In addition to these minimum requirements, universities also have the right in terms of the Universities Act, 1955 (No. 60 of 1955), to restrict the numbers of students in certain fields of study and to set additional conditions for admission to certain fields of study.

prepared for the demands of tertiary study and are consequently unsuccessful in their studies.

The increase in student numbers in recent years has placed great pressure on universities and technikons. Over the past seven years, university student numbers have shown an average annual increase of 5%, while the corresponding figure for technikons was an average 18%.

The demand for opportunities to study at the tertiary level is expected to increase in scope and intensity in the coming years. University study moreover still enjoys a special status, particularly among the less privileged communities, a fact that may place additional pressure on these institutions. The conferring of degrees by technikons should, however, serve to increase the status of these institutions.

Universities and technikons have tried to address the problem by offering academic support and bridging programmes. These programmes were initially seen as additional to mainstream programmes and were presented either prior to the start of tertiary study or during the tertiary study period in addition to the normal lecture periods as part of the academic support programme (ASP) of certain tertiary institutions.

The latest development in this field is an approach known as "academic development" (AD), in which academic support is fully integrated into mainstream programmes. AD is complemented by admission procedures that use a variety of measuring instruments in an endeavour to determine students' potential for successful university study rather

than the more traditional method of relying mainly on matriculation results. According to this approach, the final standard completed by students becomes normative, with less emphasis on the initial academic level upon admission.

In practice this results in the minimum duration of programmes being increased, as has in fact already occurred at a few institutions. Since the built-in enrichment elements are not subsidised in terms of the current subsidy formula, this approach has certain financial implications for such institutions.

However, if such an approach appears to be desirable, the possibility of formally accommodating purposely extended curricula within the official qualification structure of universities, with the related subsidy implications for the State, would have to be investigated.

An alternative in this regard would be the establishment of a system of community colleges in South Africa. As in the case of the community colleges in the USA, such colleges could, among other things, offer transfer programmes.* Students who successfully completed the two-year transfer programme at these colleges could be admitted to university or technikon study at second-year level, with the retention of the credits already obtained.

If certain technical colleges and under-utilised colleges of education could be converted to community colleges, community colleges could

* In addition, these colleges could also offer development programmes, community education and cultural enrichment programmes, continuing professional education and career-based programmes.

possibly be implemented cost-effectively; the fact that these colleges do not require an infrastructure for research is an added advantage. Otherwise other existing education facilities, for example schools, could be used for this purpose in the afternoons or evenings.

If this option were selected, no provision would be made within the qualification structure of universities for extended curricula. However, the qualification structure for community colleges would have to fit into the overarching qualification structure for the tertiary education sector (see 2.8 below) in such a way as to ensure maximum access from these institutions to tertiary institutions.

There are other possible solutions to the bridging problem besides the two options mentioned above, including a combination of these options in some form or other. The implications of any final choice in this regard will, however, have a direct bearing on the qualification structure.

2.6.3 Horizontal access

In addition to mechanisms for vertical articulation, it is essential also to create adequate articulation channels at the horizontal level within the framework of an overarching qualification structure (see 2.8 below) by means of which learners can move between tertiary institutions whilst receiving recognition for relevant credits for knowledge and skills already acquired.

In this respect, it has already been shown in 2.5.1 above that the present tertiary education system is to a large extent characterised by an inflexibility

as a result of which each subsector and institution pursues its own course largely in isolation, a state of affairs which has an inhibiting effect on the articulation of learners.

Several criteria appear to be essential to the design, acceptability and effective functioning of a framework for articulation within the tertiary sector. These criteria could include the following:

- A holistic approach to tertiary education as a system rather than as a diversity of separate units must be followed;
- Differentiation within the tertiary education system is essential;
- High minimum standards should be pursued by all tertiary institutions;
- The autonomy of institutions must be respected;
- Tertiary institutions must co-operate voluntarily in respect of articulation;
- Articulation must be cost-effective;
- A comprehensive approach to articulation must be followed;
- Maximum recognition must be given for knowledge and expertise acquired;
- The structure of programmes must be such as to eliminate "dead-end streets"; and

- Optimum use should be made of the possibilities for articulation between institutions within a regional context.

At the institutional level, maximum co-operation between bodies in a local context is important, particularly by way of co-operation agreements on a regional basis. As far as the qualification structures of the various institutions are concerned, such co-operation agreements could result in greater co-ordination in respect of programme content, examinations, standards and mutual recognition of credits obtained for knowledge and expertise acquired.

It is obvious that a flexible and well formulated qualification structure for universities is an essential element in the articulation process. In addition to laying down qualification types, such a qualification structure should also, *inter alia*, clearly spell out the required internal structure of degrees and diplomas. This information can then be used as a basis for comparison between university and other qualifications in order to ensure effective mechanisms for articulation.

2.7 A NATIONAL QUALIFICATION STRUCTURE AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

In the development of a qualification structure for universities it will be necessary to give attention to the embedding of this structure, together with those of other formal tertiary and pretertiary institutions, in a national qualification structure.

Such a national qualification structure could, in the first place, as regards the internal tertiary education

sector, create a formal link, via qualifications, between universities, technikons and colleges, which would facilitate horizontal as well as vertical articulation within this sector considerably. This could be effected by means of an accreditation mechanism which grants formal recognition for added educational value through a system of credits. These credits could then be transferred by learners to other education institutions, both intra- and intersectorally.

At the tertiary level, the success of a national qualification structure that is linked to an accreditation mechanism would depend, among other things, on the following:

- * The accreditation system would have to take into account the fact that the qualification structures of universities, technikons and colleges as tertiary sectors are directly related to their aims and functions and as such will exhibit specific educational focuses (see 2.5 above), which would render the awarding and transferability of credits problematic;
- * The accreditation system would have to take into account the fact that differences of focus frequently exist between institutions within the internal structure of each of the tertiary subsectors (and even between disciplines within the same institution), these differences being related to the requirements of the particular community served by them (see 2.5 above). This further complicates the accreditation process;
- * The autonomy of tertiary institutions (see 2.5 above) should be respected in the accreditation

process, which could imply that such accreditation should take place on a voluntary basis;

- * The qualification structures of the different tertiary subsectors would have to make more access and exit points possible, even at suitable points within uncompleted programmes, in order to increase the possibilities for articulation.

A national qualification structure should, secondly, be able to improve the links between the formal tertiary and pre-tertiary education and training sectors as far as qualifications are concerned and so increase the vertical accessibility of tertiary institutions.

In addition, a national qualification structure should also include the non-formal education and training sectors in order to facilitate the articulation of learners between the formal and the non-formal education and training sectors.

The development of such a national qualification structure is complicated by the fact that no clear and well-structured national qualification structure at present exists within the non-formal sector. This problem is compounded by two related problems, namely -

- * The absence of efficient and suitable links and of mutual recognition between the formal education system and the non-formal education and training sector; and
- * The absence of a clear career path by which a person who has undergone non-formal education and training can progress towards the acquisition of a nationally recognised occupational qualification.

2.8 PROLIFERATION OF PROGRAMMES AND PROGRAMME DESIGNATIONS AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

There are currently some 600 different degree, diploma and certificate programmes at universities in South Africa, involving approximately 4 000 instructional offerings. Technikons are not far behind, with about 400 diploma and certificate programmes and approximately 3 000 different instructional offerings.

It is understandable that such a large number of programmes might lead to uneconomical class sizes, the duplication of facilities and the ineffective utilisation of high-level lecturing and research staff, as well as increased administrative costs.

The qualification structure should bring about a considerable rationalisation in respect of programmes and programme designations. All universities need not offer all subjects and programmes from undergraduate to doctoral level. As indicated, the time has arrived for greater inter-institutional co-operation between universities and technikons, particularly at the expensive postgraduate and postdiploma levels. In this regard the expansion/establishment of centres of excellence as focal points in a regional context is essential.

However, as indicated, the rationalisation of programmes will have to be weighed against the ever increasing need for more specialised personpower.

2.9 STANDARDS AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

In view of the academic and scientific role played by universities in South Africa, it is essential that the

standards of university programmes should be unimpeachable.

A qualification structure for universities is very closely linked to the standard or quality of programmes offered by these institutions. Standards are determined, among other things, by the following:

- * The admission requirements for the programmes;
- * The types of programmes offered, for example degrees or diplomas;
- * The different levels of these programmes, for example undergraduate or postgraduate;
- * The requirements set for the content of the programmes, for example a specific compulsory choice of subjects; and
- * The required level of success to be attained by students.

In addition to the role of the national qualification structure in this respect, it is necessary for efficient mechanisms to be developed within the university sector itself which could, to complement institutional initiatives, serve to promote quality.

2.10 PERSONPOWER REQUIREMENTS AND THE QUALIFICATION STRUCTURE FOR UNIVERSITIES

The education system should, as indicated, make a constructive contribution to the necessary process of reconstruction and development in South Africa. This means, in the first place, that the needs of the country's citizens and, more specifically, its

personpower requirements must be provided for through the development of human resources.

As far as the tertiary education sector is concerned, in reaction to a request by the Universities and Technikons Advisory Council (AUT), universities and technikons in 1989 submitted long-term development plans, which contain important information on each institution as regards its objectives, expected registration numbers at the undergraduate and postgraduate levels and the expected expansion of its physical facilities.

Given these long-term development plans, this information can be used, together with other educational, economic, demographic and occupational statistics, to give an indication of how South Africa's personpower requirements could be met in the near future.

In this way, the AUT in the coming phases of the project plans to determine the number of people with specific qualifications that will be needed in order to meet these personpower requirements and in this way to minimise the so-called imbalance between what the education system produces and what the economy requires.

Universities and other educational institutions should plan their future study programmes and the number of students that will be accepted for these programmes in accordance, *inter alia*, with the results of the personpower study as soon as these become available.

The qualification structure for universities should play an important role in this process in that, in due consideration of the country's personpower requirements, it should establish the norms and standards for programmes at universities.

CHAPTER 3

CRITERIA FOR THE DESIGN OF A QUALIFICATION STRUCTURE FOR UNIVERSITIES

3.1 INTRODUCTION

Chapter 2 discussed certain factors that appear to be relevant to the development of a qualification structure for universities in South Africa. These factors serve as a background and at the same time provide substantiation for the criteria for the development of a qualification structure for universities that are developed in this chapter. Substantiation for the criteria is therefore not given in detail in each case, but certain essential aspects will be outlined in order to provide the context.

In the first place, it seems important that the qualification structure for universities should, inter alia, comply with the requirements of relevance and effectiveness. This means that programmes should be contextualised to meet the needs of the country and its people and that this should be their primary focus.

Secondly, the qualification structure should provide a framework within which the demands of science may be addressed in an effective manner.

Thirdly, the qualification structure should provide broad guidelines for programmes which will, on the one hand, ensure the necessary cohesion, coherence, quality and uniformity within the university system, but will also, on the other hand, be flexible enough to provide the necessary leeway within which individual universities may set and pursue their own objectives according to the

needs of their client community and in the national interest.

The criteria for the development of a qualification structure for universities include the following:

3.2 EMBODIMENT OF THE OBJECTIVES OF THE UNIVERSITY EDUCATION SYSTEM, THE TERTIARY EDUCATION SYSTEM AND EDUCATION IN GENERAL

In the first place, the objectives of the university sector, the tertiary education sector and education in general should, within the context of the process of reconstruction and development in South Africa, be reflected in the qualification structure of universities.

At the same time, the qualification structure should position the aims and programmes of the university sector in a coherent way in relation to the aims and programmes of the other tertiary education sectors and the pretertiary system.

At the level of the institutions, the qualification structure should establish a framework and the necessary leeway within which institutions can achieve their specific aims.

Similarly, in applying for the introduction of new programmes, universities should specify how the proposed programmes fit in with their specific aims and with the wider context.

3.3 FACILITATING ROLE IN RESPECT OF VERTICAL ACCESS

On a vertical level, the qualification structure of universities should complement the aims and qualification structures of the pretertiary education sector.

Within the university system itself the qualification structure should make provision for the various post-matriculation levels of scientific study, from university diplomas to doctorates, and these levels should link up with one another in an appropriate manner.

As regards the increasing number of students requiring academic support, the qualification structure should establish the necessary framework within which such students can be accommodated during the time they are receiving and after they have received the necessary enrichment.

3.4 FACILITATING ROLE IN RESPECT OF HORIZONTAL ACCESS

The qualification structure of universities should facilitate horizontal access at both the intrasectoral and intersectoral levels by contributing to the articulation possibilities for learners between institutions.

To achieve this, the qualification structure should comply with the following requirements:

- a) The objectives of programme types should be clearly spelled out so as to facilitate the evaluation of programme contents with a view to articulation.
- b) The requirements for the internal structure of degree and diploma programmes should be clearly laid down with a view to comparability and evaluation.

- c) The types of degree and diploma programmes should be limited, but also balanced against the personpower needs of the country and the increasing need for specialisation.
- d) The designations of programmes should be rationalised so that similar contents are reflected in similar designations, which will facilitate the comparison of programmes.
- e) The qualification structure should provide for various entry and exit points.
- f) The qualification programme should clearly stipulate the admission requirements for degree and diploma programmes.
- g) The qualification structure should facilitate the natural opportunities offered in respect of articulation in a regional context by institutions situated near to one another.

With a view to promoting articulation possibilities at the inter-sectoral level, the qualification structure of universities should be embedded together with those of technikons and other post-secondary institutions in a qualification structure that includes the whole of the formal post-secondary education sector. The academic integrity, autonomy and individual character of institutions should, however, be respected in this process.

Furthermore, the formal education sector as a whole should be linked with the informal education and training sector within an overarching qualification structure so that learners can also move between these sectors with

the retention of credits for the knowledge and skills they have acquired.

3.5 RATIONALISATION IN RESPECT OF DEGREES AND DEGREE DESIGNATIONS

The qualification structure for universities should bring about a rationalisation in respect of the large number of different degrees and diplomas and instructional offerings presented by universities. The kinds of degree and diploma programmes should be limited, bearing in mind the manpower needs of the country and the increasing need for specialisation.

Greater inter-institutional co-operation in a regional context is essential at the expensive postgraduate and postdiploma levels, as is, in particular, the establishment and expansion of centres of excellence or special expertise.

The proliferation of degree designations should be limited in order to bring about the uniformity that is so essential in this area. For this purpose, the qualification structure should lay down clear guidelines for the designations given to qualifications.

3.6 MAINTENANCE AND DEVELOPMENT OF STANDARDS/QUALITY WITHIN THE UNIVERSITY SYSTEM

The qualification structure for universities should establish norms and standards for programmes that are in line with the nature of universities as academic institutions aimed in particular at the basic theoretical and scientific schooling of students with a view to eventual high-level vocational practice and that will enable the universities to achieve their objectives to the benefit of the country.

This means that the requirements set for degree and diploma programmes should be of such a nature as to ensure that a high level of quality is maintained by the whole university system.

3.7 BROAD GUIDELINES FOR CURRICULUM DEVELOPMENT

Although it is not the task of national policy to develop curricula at university level, the policy should provide broad guidelines for programmes.

3.7.1 Degree curricula

The following guidelines should apply in respect of curricula for degrees at universities:

- a) The point of departure in the compilation of degree curricula should be the envisaged objectives of the degree

The aims of the university sector and of education in the wider context should naturally be reflected in the qualification structure for universities and, in particular, in the various curricula.

In this way the student, in the case of degree programmes, will be introduced to the basic principles of science in general and of a specific subsection thereof in particular, and also the application of these principles. This should be done in such a way as to promote the development of the student's abilities as regards analysis, synthesis, reasoning, judgement, definition, planning and methodology.

In the case of career-oriented degrees, students are also trained to fulfil the requirements of a specific occupation. This includes, in some cases, training in the ethical requirements of occupations and, in the case of the arts, in standards of performance and interpretation.

- b) The emphasis in any degree curriculum should be on subject matter that promotes the study of principles that are basic to scientific thought and methods and to the field of study concerned.

It is important that any degree curriculum should promote the principles that are basic to scientific thinking and methods. In order to ensure that each of the various kinds of degree programmes embodies this point of view in an appropriate manner, it is advisable first to consider the subject contents or disciplines more closely.

In the first place, there are certain subject contents or disciplines that can be regarded predominantly as fundamentally scientific or universally scientific or as basic. The basic principles of such a discipline are unique to that discipline and are not derived from any other discipline.

In the field of the Human Sciences study material in Psychology that complies with the following description, could for example be classified as basic subject contents:

Subject contents with regard to the behaviour and experience of the individual organism, the findings whereof are applied in the service of individuals, industry and the state.

A subject such as Legal History with the following description, could be classified as basic subject matter:

Legal History: The study of the development of the law and legal institutions, giving attention to the political, social, economic, and intellectual factors determining such development, including the study of the history of the legal systems which have in the course of history contributed to the above development.

In the field of the Natural Sciences, study material complying with, for example, the following descriptions could be classified as basic subject contents. A few examples:

Microbiology: The study of micro-organisms, including bacteria, viruses, protista, protozoans and certain fungi.

Plant Physiology: The study of plant functions, including metabolic processes such as photosynthesis, respiration, assimilation and transpiration.

Biochemistry: The study of the nature and chemical composition of the substances that make up human and animal bodies, the changes in these substances, and the energy associated with those changes.

Some subject contents cannot be typified as fundamentally theoretical or universally scientific or basic, but are basic within the context of a specific field of study in the sense that they yield the principles that are necessary to the pursuit of

that field of study. Such subject contents are therefore normally called contextually basic subject contents.

In the field of the Human Sciences, study material in Psychology that complies with the following descriptions could, for instance, be classified as contextually basic subject contents:

Neuropsychology: The study of the nervous system, especially the central nervous system, as it participates in or determines behaviour, including relevant studies of neuroanatomy and neurophysiology.

Industrial psychology: The study of the use and outcomes of psychological methodology in industry.

Other examples from the Human Sciences:

Mercantile Law: The study of the law relating to business, including the law relating to companies, partnerships, financial institutions, negotiable instruments, immaterial property, competition, insolvency, insurance, labour relations, taxation, carriage, shipping and maritime matters and commercial financing.

Public Law: The study of the law relating to matters of public or general interest, including administrative law, constitutional law, criminal law, the interpretation of statutes, medical jurisprudence and communication law.

In the field of the Natural Sciences study material complying with the following descriptions could be classified as contextually basic subject contents:

Ecology: The study of the interrelationships between organisms and their environment.

Embryology: The study of the growth, development, structure and functions of embryos.

Medical Genetics: The study of the resemblances and differences of related organisms resulting from the interaction of their genes and their environment, and the application of such knowledge to the restoration and preservation of good health.

Haematology: The study of the nature, functions, and diseases of blood and bloodforming organs and tissues in animals and humans.

Lastly, there are subject contents that represent applications of existing knowledge, technologies and formulas. These subject contents can be typified as applications of the contents of the first two categories and often focus on the acquisition of application skills.*

* In this respect, compare the classification into A, B, and C type subject contents in the policy document Requirements for instructional programmes at technikons (NATED 02-150 (94/01) p.13). According to this classification, the C type subject contents at technikons are in agreement with basic and contextually basic subject contents. B type subject contents are aimed mainly at the mastery of the application of existing knowledge, technologies, results and formulas in practice, while A type subject contents are aimed mainly at the practising and mastery of skills, methods of doing and applications. A and B type subject contents are therefore both applied subject contents.

Universities place more emphasis on the C type subject contents, technikons on the B type and technical colleges on the A type. A technikon degree differs from a university degree in this respect that it contains fewer C type subject contents and more B type subject contents.

It is important that in degree curricula there should be a sound balance between the different types of subject contents. Although the emphasis must be on basic and contextually basic subject contents in all degree curricula, the percentage of such subject contents must also be appropriate to the objectives set for the degree curriculum concerned.*

- c) A degree curriculum should be structured around a major subject or subjects and may be supported by a complementary subject or subjects

A degree programme is not characterised by the nature of its contents only, but also by the structuring of the total content. This structuring of the material, which is particularly important in career-oriented degrees, should be done in such a way that the different elements of the subject matter form a planned whole and support one another in achieving the relevant objectives of the degree.

In such a case, the major subject or subjects (a subject(s) which is taken up to the final year level of the particular programme) form a focal point(s) around which the rest of the curriculum is designed. Additional subjects included in the curriculum together with the major subject(s) should normally play a complementary and supporting role in respect of the major subject(s).

- d) The handling of inter-relationships between the subdivisions of science

* In the Annexure (pp. 75-77), the composition of degree curricula with regard to the different types of subject contents is further dealt with.

Where practicable, an understanding of the coherence of the sciences should be fostered in students. This objective can be achieved in degree curricula by careful curriculum development, aimed at giving students a view of the inter-relationships between the various subdivisions of the field of knowledge as a whole.

Emphasising the methodological aspects of the acquisition of knowledge and problem solving could provide an equally important basis for maintaining the unity of science. The unnecessary fragmentation of knowledge should therefore be avoided not only in the composition of degree curricula but elsewhere as well.

3.7.2 Diploma curricula

Since universities as well as technikons and colleges offer diploma programmes, universities wishing to introduce initial or advanced diplomas should furnish reasons on the basis of the requirements in 5.2 below why they should offer the said diploma.

The objectives of diplomas at universities should also be reflected in the curriculum. The following objectives could apply in respect of the different diplomas:

a) Initial diplomas

The primary objective of an initial diploma is normally to prepare students for a specific career. The subject matter should be selected from subject matter already offered at the university for other qualifications.

b) Advanced diplomas

Advanced university diplomas are normally focused on occupational specialisation, which should of course also be reflected in the curriculum. The contents of advanced university diplomas should build on the level of work in the initial diploma.

c) Postgraduate diplomas

The primary objective of a postgraduate diploma is to broaden the knowledge that a student has acquired during his/her studies for a bachelor's degree, or to give that knowledge a practical application. This objective should again be reflected in the curriculum.

3.8 FOCUS ON THE PERSONPOWER REQUIREMENTS OF THE COUNTRY

The qualification structure for universities should be focused on the country's personpower needs as part of the process of reconstruction and development in South Africa.

Provision should be made, in the first place, for an adequate number of programme types to accommodate the variety of personpower needs in the country.

Secondly, the qualification structure should establish guidelines for the details internal to the programme in respect of matters such as content, duration, balance of subjects, focus and standards of programmes, so that maximum effectiveness can be achieved in providing for the personpower needs.

Since personpower requirements vary continually, it is essential that the qualification structure should keep abreast of changing circumstances and be adapted and updated in order to remain relevant and to exercise a determinative influence.

Besides the focus on personpower needs, the qualification structure for universities should also make possible programmes that, although not directly related to personpower needs, provide personal fulfilment and edification for individuals or communities.

Universities should be required in their applications for the introduction of new programmes to indicate clearly to what extent the proposed programmes are oriented towards personpower requirements and how they envisage dealing with student intakes for these programmes.

CHAPTER 4

GUIDELINES FOR DEGREE PROGRAMMES

4.1 INTRODUCTION

Chapter 3 presented criteria that should be used as a yardstick in the design of a qualification structure for universities. Against this background, this chapter formulates guidelines for a qualification structure for degree programmes, including broad policy guidelines in respect of the types of degrees, their objectives, admission requirements, balance of subjects and duration. In Chapter 5, similar policy guidelines will be formulated for diplomas.

Within the broad guidelines proposed in this chapter and in Chapter 5, it is the task of individual institutions to plan their own qualification structures in accordance with the aims of the institution concerned, the needs of the specific community they serve and the national interest. Institutions could, for example, utilise some of the options from the qualification structure by concentrating on certain types of degrees and diplomas.

Subsidies are contributed by the State for students in degree and diploma programmes at universities which are approved by the Minister of Education. If institutions should wish to present non-formal short courses or certificate programmes, they would be free to do so, but no subsidy would be received from the State in such cases.

4.2 FIRST BACHELOR'S DEGREES

Two kinds of first bachelor's degrees are distinguished from each other, namely generally formative and career-related bachelor's degrees.* The admission requirement for first bachelor's degrees is a matriculation or matriculation exemption certificate or a certificate of exemption from the endorsement requirements for bachelor's studies, as issued by the Matriculation Board or the Committee of University Principals.**

4.2.1 Generally formative bachelor's degrees

- (a) The programme of studies for generally formative degrees should consist of three credits*** and should comply with the criteria in paragraph 3.7.1.
- (b) At least 50% of the credits for a generally formative bachelor's degree should consist of basic subject contents. This 50% should consist of credits for a major or important subject that is taken up to at least third-year level, as well as subject matter from the same broad group of subject contents as the major or important subject.

* A career-related degree is so put together that as regards composition and focus of subject contents it is aimed directly at the training needs of a specific occupation. A generally formative degree, on the other hand, is made up of subject contents that are not aimed directly at the training needs of a specific occupation, but rather at a more general formation within a specific field of study.

** A candidate could, under certain circumstances, also be conditionally admitted to degree studies.

*** The total number of credits for the required study programme for a full-time student in any given year is one (1.0).

4.2.2 Career-oriented bachelor's degrees

- (a) Career-oriented bachelor's degrees consist of three or more credits.
- (b) It is accepted that the requirements of subject fields and occupations may differ in respect of the number of years needed to give students a grounding in basic scientific principles and to prepare them for the demands of a particular career. For example, certain subject fields and occupations might require a minimum of four years, whereas in other cases three years might be sufficient.
- (c) At least 50% of the credits for career-oriented bachelor's degrees should consist of basic and contextually basic subject contents. At least half of this 50% should represent basic subject contents.

4.3 ADVANCED BACHELOR'S DEGREES

4.3.1 General

- (a) Advanced bachelor's degrees (B Ed, LLB, B D, B Phil, B Arch, BTh and Th B (the latter three being advanced degrees and not the first bachelor's degrees with corresponding titles)) are career-oriented degrees for which, because of the professions to which they relate, another bachelor's degree is normally set as an academic prerequisite.*

* According to the Universities Act, 1955, No. 61 of 1955, Section 10A (b), a senate may admit any person who i) has passed at any other university or institution (whether in the Republic or elsewhere) such examinations as in its opinion are equivalent to or higher than examinations prescribed for a degree of its university which is a prerequisite to a specific postgraduate course of study or for the admission of such person as a research student; or ii) has in any other manner attained a level of competence which in its opinion is adequate

- (b) An advanced bachelor's degree presupposes an advanced level of study including at least one credit at the level associated with honours studies and can therefore grant direct access to master's degree studies and, in the case of the LLB and B D, also to doctoral studies.
- (c) The advanced bachelor's degree B Phil can be earned on the grounds of inter-disciplinary studies which include at least one credit at the level associated with honours degree studies.
- (d) The introduction of further advanced bachelor's degrees, over and above the current B Ed, B D, ThB, B Arch and LLB that comply with the guidelines given above, may in exceptional cases be considered for inclusion in this policy if the same objective cannot be achieved through either an honours bachelor's degree, a four-year career-oriented degree, a postgraduate diploma or a master's degree.

4.3.2 The Bachelor of Education degree (B Ed)

- (a) Persons who are only in possession of a four-year Higher Education Diploma (university diploma) must, before being admitted to the B Ed programme, advance, both in respect of the professional and the non-professional degree component, by additional work (the acquisition of credits) to a level equivalent to that of the integrated four-year B Ed degree (or a bachelor's degree plus a postgraduate HED).

for the purposes of postgraduate studies or research, as a candidate for a postgraduate degree or a postgraduate diploma.

- (b) Persons having education diplomas from education institutions other than universities must, by additional work, first reach a level equivalent to a four-year university education diploma. Thereafter they may follow the same course as the persons in (a).
- (c) The B Ed degree may be granted only after the successful completion of at least five credits, provided that the five credits may include the following:
 - (i) Three credits for the acquisition of a generally formative or three-year career-oriented first bachelor's degree, and one credit for the study for a postgraduate education diploma;
 - (ii) Four credits for a four-year or longer study for a career-oriented first bachelor's degree;
 - (iii) A maximum of four credits for the undergraduate HED plus additional work as provided under (a);
 - (iv) A maximum of four credits for education diplomas from educational institutions other than universities plus additional work as provided under (b).

4.4 HONOURS BACHELOR'S DEGREES

- (a) It is accepted as a general guideline that any postgraduate degree should build further on the foundations laid by a major subject or major subject field of a bachelor's degree or a suitable multi-disciplinary undergraduate subject matter package.

- (b) Honours degrees should consist of one credit and should involve academic studies at greater depth or specialisation in a major subject or major subject field from a first bachelor's degree.

4.5 MASTER'S DEGREES

Two types of master's degrees are distinguished from each other:

4.5.1 Traditional master's degrees

- (a) Traditional master's degrees build on a previous degree and involve greater depth of study and specialisation in a previously studied major subject or major subject field.

- (b) This type of master's degree normally comprises a research project that leads to a dissertation or consists of lectures plus a thesis or research report(s).

- (c) A traditional master's degree comprises one or two credits and can only be granted after the successful completion of at least five credits, provided that the five credits may include the following:

- (i) a maximum of four credits for an

honours degree

OR a career-oriented first bachelor's degree
consisting of four or more credits

OR an advanced bachelor's degree;

- (ii) three credits for a first bachelor's degree consisting of three credits. The introduction of

master's degrees that follow on a first bachelor's degree of three credits will be considered only in exceptional circumstances.

- (d) A university may require additional preparatory study or set other requirements (for example, practical experience).

4.5.2 Career-oriented/interdisciplinary master's degrees:

- (a) These master's degrees are granted in fields of study that have not been studied as such at undergraduate level and which may be of an interdisciplinary nature or oriented towards a specific career.
- (b) The degree must consist of at least two credits.
- (c) Admission is restricted to persons who are in possession of -

- at least a four-year degree
- OR an honours degree
- OR an advanced baccalaureus degree
- OR a three-year degree plus applicable practical experience as required by the university concerned;

Universities may require additional preparatory studies or set other requirements in order for the student to attain the required level of knowledge and skill in the disciplines in question.

- (d) In addition to class work, the studies must also include a research component by which evidence is given of skill in dealing with research methods and techniques by means of a thesis or research

report(s) of limited scope, the topic of which has been approved by the faculty concerned.

- (e) The normal standard for master's studies must be attained in studies for career-oriented master's degrees, regarding both the theoretical content, the academic depth of the class work and the research component.

4.6 DOCTORATES

- (a) Studies for a doctorate comprise original research under the guidance of a supervisor which is documented in a thesis or a number of publications.
- (b) Normally a doctorate follows on a master's degree. A doctorate may also be conferred on the basis of original research to persons who have already obtained an advanced bachelor's degree or an honours degree, provided that such doctorate may be conferred only after work equivalent to two credits has been completed.
- (c) Advanced doctorates may be conferred on persons who have published original research of an excellent quality through which an outstanding contribution has been made to the extension of knowledge in a particular subject field.

4.7 PRINCIPLES FOR DEGREE DESIGNATIONS

The designations of degree and diploma programmes should be chosen in such a way that they are descriptive and user-friendly. At the same time, for the sake of cohesion and mutual congruence within the international university fraternity, they should not differ drastically

from those of similar programmes at leading universities elsewhere in the world.

The following principles apply in the determination of degree designations:

- (a) Only one degree designation per language of instruction (or Latin) shall be used among universities for each degree or field of study.
- (b) For generally formative bachelor's degrees and traditional master's degrees only the designation of the basic subject groups, without any further suffixes, shall be used together with "bachelor" and "master".
- (c) One of two types of designations shall be used for career-oriented bachelor's and career-oriented/interdisciplinary master's degrees, i.e.:
 - (i) the designation of the generally formative degree (e.g. BA) plus the line of specialisation in brackets in, e.g. BA (Fine Arts) or BA (Ed);
 - (ii) the designations "bachelor", "honours bachelor" or "master" plus the line of specialisation, e.g. B Mus or M Eng.
- (d) In the case of honours degrees, the designation "honours" plus the line of specialisation will be used without any further suffixes, for example, B Sc Hons, B A Hons, etc. The alternative form, Hons B Sc, Hons B A, etc. is also permitted.

- (e) In the case of doctorates, preference shall be given to the custom of conferring the Ph D degree for a first doctorate obtained for original research under the guidance of a supervisor.

For advanced doctorates, the designations D Sc, D Com, D Ed, etc. shall be used.

- (f) On their certificates universities may, in cases where further identification of degrees is considered necessary, add a suffix/endorsement in the relevant language(s) of instruction (or in Latin). Such a suffix shall not however constitute part of the official degree designation.

CHAPTER 5

GUIDELINES FOR DIPLOMA PROGRAMMES

5.1 INTRODUCTION

Chapter 4 contains a degree structure for universities. In this chapter, a structure for diploma programmes at universities is presented. As in the case of the degree structures, the diploma structure has been developed on the basis of the criteria in Chapter 3.

Except where otherwise determined by any provision of the law dealing with the designation or duration of diploma qualifications, or by any policy prescribed in terms of a law by notice in the Government Gazette, the following policy shall apply to the presentation of diplomas by universities.

5.2 GENERAL

Universities offer three types of diplomas, namely initial, advanced and postgraduate diplomas, subject to the following general conditions:

- (a) Normally the presentation of initial and advanced diplomas (see paragraphs 5.3 and 5.4 below) falls within the ambit of technikons and colleges. When a university applies to offer a certain diploma (excluding a postgraduate diploma), it is therefore expected that the university should motivate why it should offer the particular diploma.

- (b) In all cases where universities offer diplomas, a senior certificate shall be the minimum prerequisite for admission.
- (c) Universities can make a contribution to community instruction by way of diploma training. However, it should first be established whether a technikon or college could not also (or should not rather) make that contribution.

5.3 INITIAL DIPLOMAS

- (a) The primary purpose of an initial diploma (university diploma) is normally to prepare a student for a specific occupation.
- (b) A university diploma should consist of three credits. At least 40% of the subject contents should comprise basic and/or contextually basic subject matter. Two-year university diplomas are permissible in exceptional cases only.
- (c) The basic and contextually basic subject matter of a university diploma should be selected from subject matter that the university concerned already offers for other qualifications.
- (d) A candidate who obtained a three year initial diploma and, in the opinion of the senate of a university, has reached an academic level equivalent to that of a three year career-oriented bachelor's degree, could under certain circumstances be admitted to undergraduate (as well as postgraduate) studies in the particular discipline.

- (e) The designation for an initial diploma shall be: University diploma in (for diplomas in Education, see 5.6.1).

5.4 ADVANCED DIPLOMAS

- (a) The admission requirement for an advanced university diploma is an appropriate university diploma or any other qualification that the Senate of the university deems at least equivalent to a university diploma.
- (b) The content and academic standard of an advanced university diploma should build on the level of work in the initial diploma.
- (c) An advanced university diploma consists of one credit.
- (d) The designation for advanced university diplomas shall be: Advanced University Diploma in ... (for advanced university diplomas in Education, see 5.6.2).

5.5 POSTGRADUATE DIPLOMAS

- (a) The admission requirement for a postgraduate diploma is a bachelor's degree or any other qualification that the Senate of the university deems equivalent to a bachelor's degree and on the basis of which degree status can be awarded.
- (b) A postgraduate diploma should build on a bachelor's degree in the sense that it requires of the student a level of intellectual development normally associated with what is achieved during a three-year bachelor's degree.

- (c) The primary intention of a postgraduate diploma is to extend the knowledge that a student has acquired during bachelor degree study or to give that knowledge a practical application.
- (d) A postgraduate diploma consists of one credit.
- (e) The designation for a postgraduate diploma is: Postgraduate Diploma in ... (for postgraduate diplomas in Education, see 5.6.3).

5.6 DIPLOMAS IN EDUCATION

5.6.1 Initial diplomas

- (a) An initial diploma specifically directed at the needs of education is known as a Diploma in Education or a Higher Diploma in Education;
- (b) A Diploma in Education has to meet the requirements of 5.3(a)-(d) above.
- (c) A Higher Diploma in Education has to meet the requirements of 5.3(a)-(d) above, on the understanding that the four credits may include a maximum of three credits for a three year teaching diploma.

5.6.2 Advanced Diplomas

- (a) An advanced diploma directed specifically at the needs of education is known as a Further Diploma in Education or a Diploma in Specialized Education;
- (b) These diplomas have to meet the requirements in 5.4(a)-(c) above on the understanding that admission

be restricted to persons regarded as professionally qualified at Category C (M + 3).

5.6.3 Postgraduate Diplomas

- (a) A postgraduate diploma directed specifically at the needs of Education is known as a Higher Education Diploma or a Higher Diploma in Education (Postgraduate) or a Postgraduate Diploma in Tertiary Education;
- (b) These diplomas have to meet the requirements in 5.5(a)-(d) above.

CHAPTER 6

SUMMARY

The success of the qualification structure for universities (chapters 4 and 5) must be assessed on the basis of the criteria for a qualification structure (Chapter 3). No assessment as such is made here. As a resource for such an assessment process, these criteria are listed in 6.1-6.7 below, accompanied by related aspects of the proposed qualification structure for universities.

6.1 THE OBJECTIVES OF THE UNIVERSITY EDUCATION SECTOR, THE TERTIARY EDUCATION SECTOR AND EDUCATION IN GENERAL MUST BE REFLECTED IN THE QUALIFICATION STRUCTURE FOR UNIVERSITIES WITHIN THE PROCESS OF RECONSTRUCTION AND DEVELOPMENT IN SOUTH AFRICA.

(a) The proposed qualification structure endeavours to reflect the objectives of universities in respect of high-level teaching and research with a view to, *inter alia*, the delivery of top-level personpower by the establishment of high-quality qualifications with-

- the emphasis on teaching and/or research, with or without experiential training;
- different aims (for example, generally formative as opposed to vocationally oriented);
- different possibilities in respect of groupings of disciplines (for example intra-disciplinary as opposed to trans-disciplinary);

- varying amounts of compulsory basic and contextually basic subject contents; and
 - varying durations depending on the aims, subject fields, etc. concerned.
- (b) The qualification structure further endeavours to position universities in respect of their objectives and qualifications as against technikons and colleges by, among other things, emphasising basic scientific practice in the teaching and research done at universities as against vocational preparation as such at the other institutions.
- (c) The qualification structure endeavours to establish a broad framework for university qualifications that will at the same time afford institutions sufficient freedom, in terms of their autonomy and according to the needs of their specific clients, to develop their own qualification layout by, for example, focusing on certain types of programmes.

Figure 1 shows a broad typology of proposed degree programmes and Figure 2 of proposed diploma programmes.

FIGURE 1: TYPOLOGY OF PROPOSED DEGREE PROGRAMMES

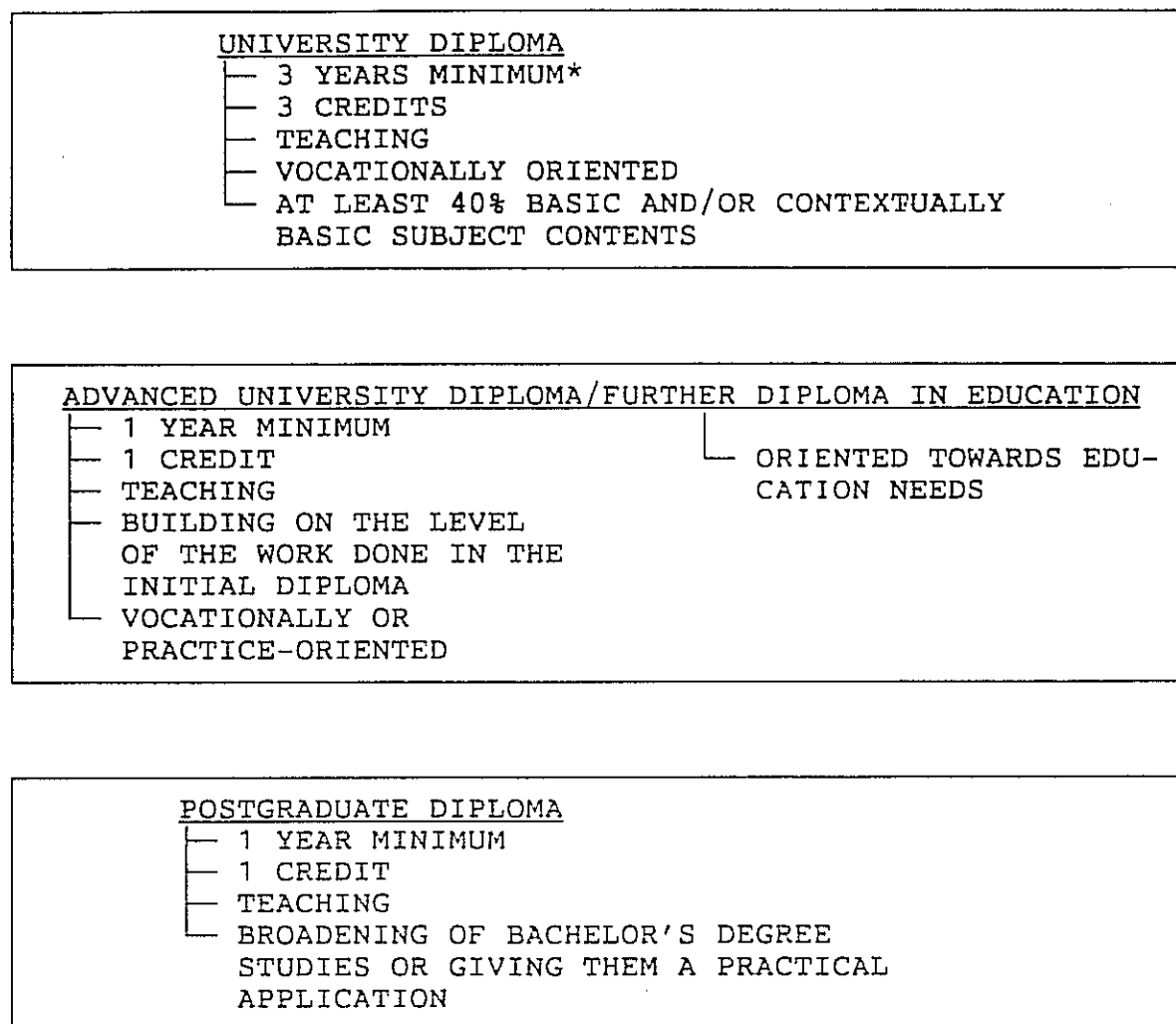
UNDERGRADUATE

<u>BACHELOR'S DEGREES</u>	
<u>GENERALLY FORMATIVE DEGREES</u>	<u>VOCATIONALLY ORIENTED DEGREES</u>
<ul style="list-style-type: none"> — 3 YEARS MINIMUM — 3 CREDITS — TEACHING — AT LEAST 50% BASIC SUBJECT CONTENTS 	<ul style="list-style-type: none"> — 3 YEARS MINIMUM — 3 OR MORE CREDITS — TEACHING — AT LEAST 50% BASIC AND CONTEXTUALLY BASIC SUBJECT CONTENTS; OF THIS 50% AT LEAST HALF MUST BE BASIC SUBJECT CONTENTS.

POSTGRADUATE

<u>ADVANCED BACHELOR'S DEGREES</u> <ul style="list-style-type: none"> — 1 YEAR MINIMUM — 5 CREDITS, INCLUDING THE CREDITS FOR THE FIRST DEGREE AND/OR APPLICABLE DIPLOMA CREDITS — TEACHING — VOCATIONALLY ORIENTED 	
<u>HONOURS DEGREES</u> <ul style="list-style-type: none"> — 1 YEAR MINIMUM — 1 CREDIT — TEACHING — NORMALLY DEEPENING OR SPECIALISATION IN MAJOR SUBJECT OR MAJOR SUBJECT FIELD OF FIRST BACHELOR'S DEGREE 	

FIGURE 2: TYPOLOGY OF PROPOSED DIPLOMA PROGRAMME



6.2 THE QUALIFICATION STRUCTURE MUST FACILITATE VERTICAL ACCESSIBILITY

- (a) The qualification structure endeavours to facilitate vertical accessibility by the establishment of a variety of qualifications which -

- * relate meaningfully to each other;
- * are of a progressive degree of difficulty; and

* In exceptional cases a minimum of 2 years.

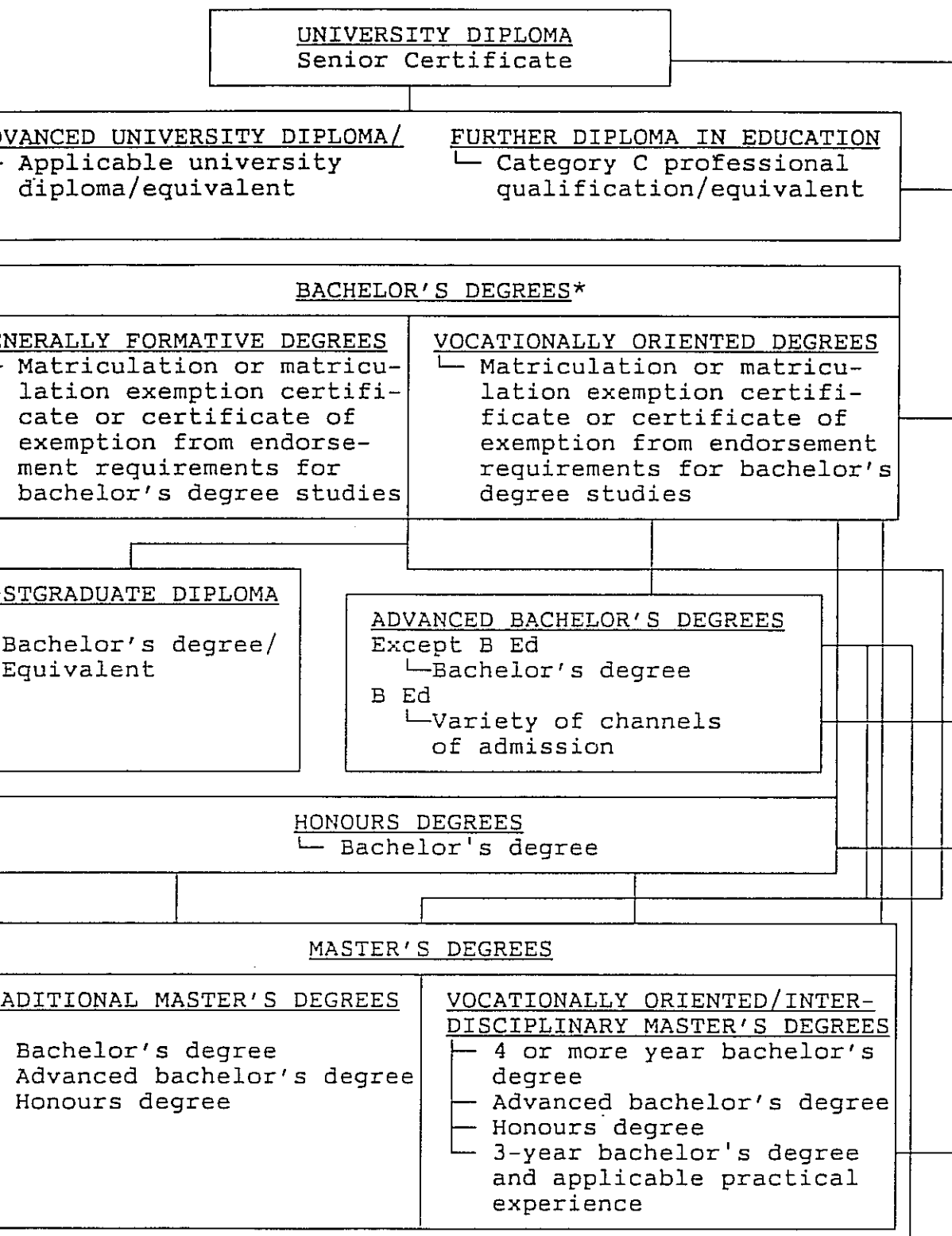
- * set a variety of admission requirements.
- (b) The qualification structure assumes that there will be academic support mechanisms to enable students from less privileged communities to reach the required academic level before commencing their university studies.

Although the proposed qualification structure does not reflect the option of academic support by means of enriched (and extended) university programmes, the proposed time frame of the undergraduate curricula could be adjusted by extending the period of study for a particular programme (= n years) by, for instance, one year (= n+1) or semester and distributing the subjects accordingly.

- (c) It is assumed that the inclusion of the qualification structure for universities within the framework of a national qualification structure, with which the pre-tertiary non-formal training sector is linked, may require adaptations/extensions to the proposed qualification structure (for example in respect of types of qualification requirements) with a view to facilitating vertical articulation.

Figure 3 gives an indication of the possibilities for vertical articulation within the proposed qualification structure:

FIGURE 3: POSSIBILITIES FOR VERTICAL ARTICULATION WITHIN THE PROPOSED QUALIFICATION STRUCTURE



Credits for individual instructional offerings passed in diploma programmes may also be transferred to studies for a bachelor's degree if they fit into the context of the relevant degree.

adaptations in the proposed qualification structure with a view to horizontal articulation.

6.4 THE QUALIFICATION STRUCTURE MUST EFFECT A RATIONALISATION WITH REGARD TO DEGREES AND DEGREE DESIGNATIONS

The proposed qualification structure endeavours to restrict the number of degree and diploma types and their designations, bearing in mind the changing personpower requirements. Figure 4 shows the proposed rationalisation with regard to degree designations and Figure 5 with regard to diploma designations:

FIGURE 4: A RATIONALISED STRUCTURE FOR DEGREE DESIGNATIONS

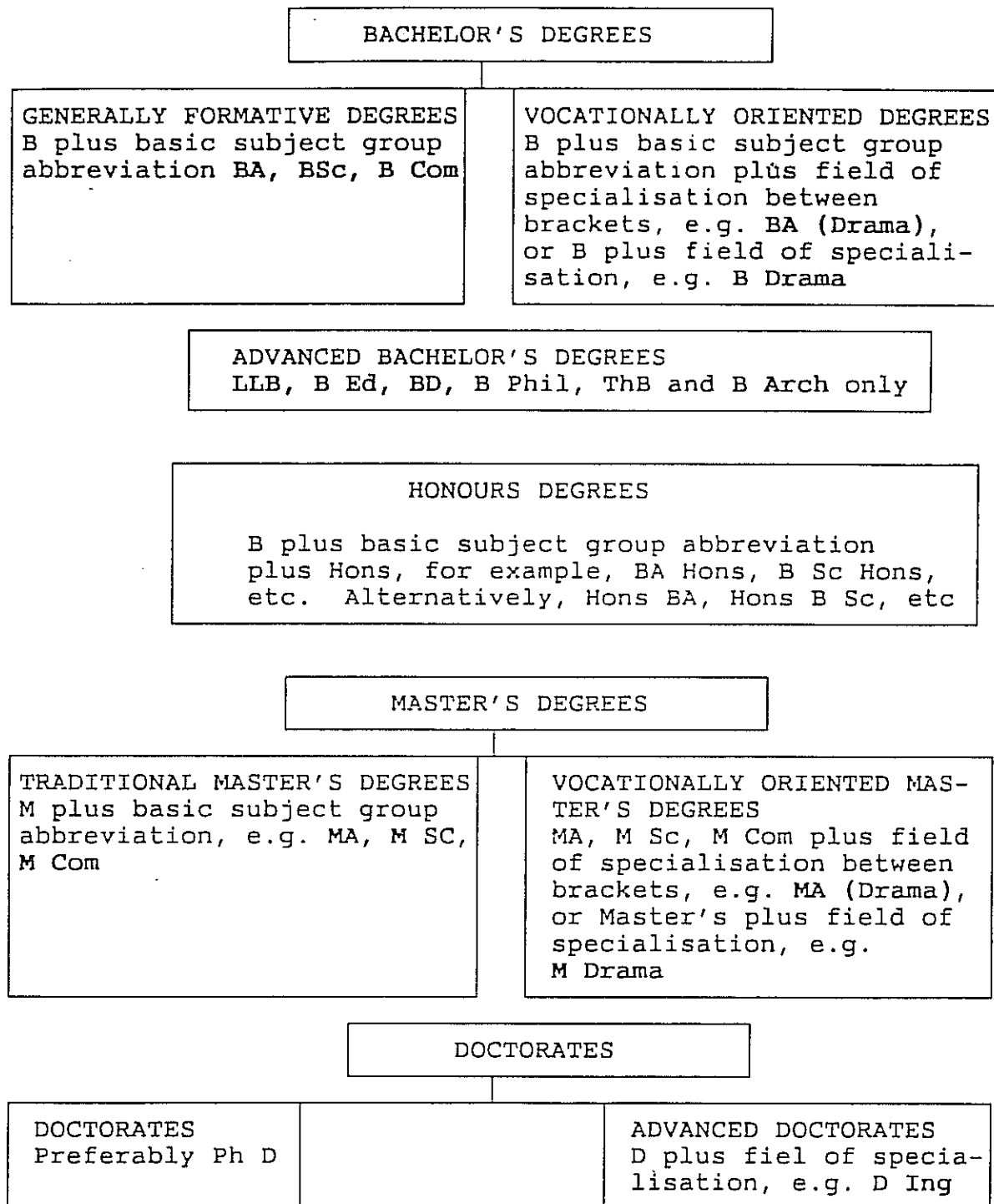
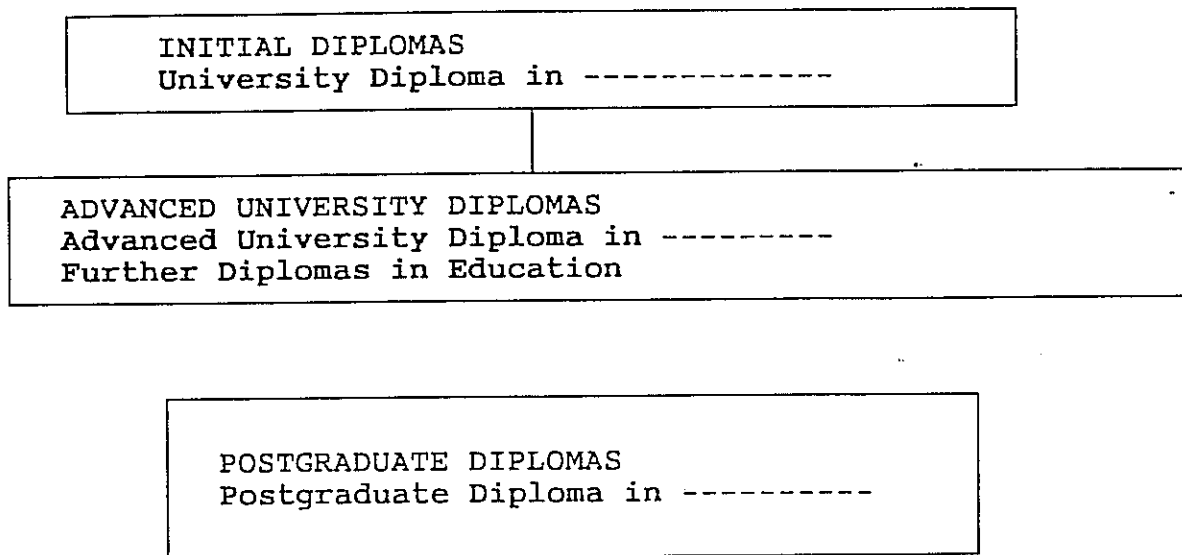


FIGURE 5: A RATIONALISED STRUCTURE FOR THE DIPLOMA DESIGNATIONS



6.5 THE QUALIFICATION STRUCTURE MUST MAINTAIN AND DEVELOP STANDARDS/QUALITY WITHIN THE UNIVERSITY SYSTEM

The proposed qualification structure endeavours to maintain/develop standards/quality within the university system by means of appropriate -

- objectives for university programmes;
- admission requirements of a high quality that vary progressively according to the degree of difficulty of programmes; and
- requirements for the internal details of programmes in respect of the number of basic and contextually basic subject contents.

6.6 THE QUALIFICATION STRUCTURE MUST PROVIDE BROAD GUIDELINES FOR CURRICULUM DEVELOPMENT

- (a) The proposed qualification structure provides the following broad guidelines with regard to the

internal relationships of subjects in degree curricula:

- In developing degree curricula the point of departure is the objectives set for the degree;
- In degree curricula the emphasis is on subject contents that promote the study of principles basic to scientific thought and method and to the field of study concerned;
- A degree curriculum is developed around a major subject or major subjects and may be supplemented by an additional subject or additional subjects; and
- The unity of science must be maintained.

(b) The proposed qualification structure provides the following broad guidelines with regard to the objectives of diploma curricula:

- The primary objective of initial diplomas is preparation for a vocation. The minimum number of basic subject contents are specified for initial diplomas;
- Advanced diplomas normally concentrate on vocational specialisation; and
- Postgraduate diplomas comprise a broadening of the knowledge acquired during the bachelor's degree studies or give them a practical application.

6.7 TAKING INTO ACCOUNT THE PERSONPOWER REQUIREMENTS OF THE COUNTRY

The proposed qualification structure -

- endeavours to make provision for a sufficient number of programme types to accommodate the variety of personpower requirements of the country;
- provides guidelines for the internal details of programmes in respect of matters such as content, duration, subject balance, focus and standards in an effort to ensure maximum effectiveness as far as personpower requirements are concerned.

It is obvious that a comprehensive study of South Africa's personpower requirements is a prerequisite for any thorough evaluation of the qualification structure for universities. Such a personpower study is today in fact one of the priorities for education, with direct implications, among other things, for the development of the qualification structure for universities.

However, since personpower requirements tend to fluctuate, qualification structures for institutions cannot be static but must be constantly updated and adapted to keep abreast of changing circumstances in order to continue to meet the general criteria of relevance and effectiveness.

ANNEXURE

THE EVALUATION OF UNIVERSITY APPLICATIONS FOR THE INTRODUCTION OF NEW PROGRAMMES

In terms of the Advisory Board for Universities and Technikons Act, 1983 (No. 99 of 1983), universities are obliged to submit applications for, inter alia, new programmes to the Advisory Council for Universities and Technikons. In their applications universities must furnish the following information:

- (1) Date of approval by the Council of the university.
- (2) Purpose of the application (e.g. the introduction of a new degree or diploma programme). Here it must be specified in what way the application has taken the country's personpower requirements in the field concerned into consideration.
- (3) The designation and the abbreviation of the proposed degree or diploma.
- (4) Admission requirements.
- (5) Duration of the degree/diploma programme and the number of credits.
- (6) Evaluation of the proposed degree or diploma programme on the basis of the guidelines for a degree or diploma structure contained in Chapters 4 and 5 of this document.
- (7) Breakdown of the contents of the degree or diploma programme.
- (8) Evaluation of the degree or diploma programme.
- (9) Examinations (internal and external).

- (10) Similar programmes at other universities or education institutions in South Africa.
- (11) Proposed year of introduction and expected number of students for first five years.
- (12) The range of research outputs and qualifications of the lecturers concerned, especially with regard to the proposed programme.
- (13) The financial implications of the application, for instance additional lecturers and facilities.

As regards applications from universities for the introduction of new programmes as such, an annexure to the previous edition of this report contained lists of basic and contextually basic subject contents that were used to evaluate university applications.

These lists presented several problems of a theoretical as well as a practical nature. Among these the following may be mentioned:

- * The lists were based on the classification of subject contents contained in the report Classification of educational subject matter (Report SAPSE-003) which was not designed for this purpose.
- * The lists do not differentiate between the different years of a subject. Subjects may differ considerably from year to year as regards the percentage of "basic" and "contextually basic" subject contents. Even within a particular year of a subject, elements may be identified that belong to different categories, some basic, others contextually basic or applied.

- * Owing to certain premises, the lists exclude particular subject contents such as certain theological and law subjects which have formed part of university studies since the inception of the modern university in the Middle Ages.
- * The description of the various subject contents in the lists is often inadequate for the purpose of evaluating the classification thereof.
- * The lists have given rise to an inflexible interpretation of the classification of subject contents.
- * The lists have not been updated for some years and are therefore obsolete.

In their applications for new programmes, universities must in future specify the internal details of programmes as well as the component instructional offerings in each year in respect of the ratio of basic, contextually basic and applied subject contents on the basis of the definitions and examples of these types of subject contents given in Chapter 3. This information will be used to determine whether the programme as a whole complies with the set requirements as contained in Chapters 4 and 5.

This system would hold the following advantages:

- (i) It makes it possible to differentiate between the various years of a subject in that a difference, where applicable, can be indicated with regard to the content of a subject in the different years.
- (ii) It can differentiate between the various types of subject contents within a particular year of a subject.
- (iii) It eliminates problems regarding the completeness and

accuracy of the lists of subjects.

(iv) It prevents a purely "mechanistic" testing of programmes on the basis of listed information.

(OB380115)