CHAPTER 3:
FRAMEWORK OF NEONATAL NURSING EDUCATION IN THE SOUTH AFRICAN CONTEXT

3.1   INTRODUCTION

The education of neonatal nurses does not take place in isolation, but occurs in a well-organised framework. The main aspects of this framework are the statutory regulations for nursing education set by the SANC in terms of the Nursing Act, no. 50 of 1978 (South Africa 1978), which will be replaced by Act no. 33 of 2005 (South Africa 2005a) on a date determined by the President (SANC 2006), and legislation regulating higher education in terms of the Higher Education Act, no. 101 of 1997 (South Africa 1997).

As mentioned before, this study departed from the central assumption that reflective neonatal nurses are needed in neonatal nursing practice. The challenge identified was on how to educate them to prepare them accordingly. Any model being developed for the education of reflective neonatal nurses must take into account the existing framework of nursing education otherwise it would not be possible to implement it.

The aim of this chapter was to explore the framework of neonatal nursing education in the South African context, including the framework of higher education, the history of nursing education, current practice, and other influencing factors on the education of neonatal nurses in a South African context. By doing so, the components of the model that are addressed include the framework (higher education and nursing education) and the purpose (outcomes of educational programme).

3.2   HIGHER EDUCATION IN SOUTH AFRICA APPLICABLE TO NEONATAL NURSING EDUCATION

Nursing education, being part of the main stream of higher education in the South African context, has to comply with higher education requirements. Changes in higher education systems, especially in the last decade, have contributed significantly to the development of

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nursing education. Particularly important developments in higher education were the promulgation of the Higher Education Act, no. 101 of 1997 (South Africa 1997) and the South African Qualifications Authority Act, no. 58 of 1995 (South Africa 1995); the adoption of outcome-based education as the basic philosophy of education in South Africa at all levels (South Africa 1995); and the publication of the National Qualifications Framework (Ministry of Education 2006). Each of these will be briefly discussed.

3.2.1 Higher Education Act, no. 101 of 1997

The Higher Education Act, no. 101 of 1997 (South Africa 1997), legislates for a transformed and unified national higher education system that:

- promotes equal accessibility and opportunity of success for all students,
- develops programmes that produce highly skilled graduates with qualifications that meet the country's employment needs,
- promotes critical and creative thinking, tolerance and a commitment to the common good through its teaching, and
- produces research of an international standard which is at the same time cognisant of its African context.

The Ministry of Education sets the norms and standards for higher education, including funding, planning and qualifications structure (Boughey 2004:6-7; Ministry of Education 2006; Ministry of Education 2004:7; South Africa 1997).

The envisioned programme for educating reflective neonatal nurses accords with this act, especially in the programme's focus on critical and creative thinking, and its aim to meet the country's employment needs by producing skilled lifelong learners in a highly specialised field.

3.2.2 South African Qualifications Authority (SAQA)

The aim of the South African Qualifications Authority Act, no. 58 of 1995 (South Africa 1995), is "to provide for the development and implementation of a National Qualifications Framework (NQF) and for these purposes to establish the South African Qualifications Authority (SAQA) and to provide for matters connected therewith." SAQA was mandated to ensure that

provisions for accreditation are complied with and, where appropriate, that registered standards and qualifications are internationally comparable.

SAQA is a body of 29 members appointed by the Minister of Education and Labour according to the South African Qualifications Authority Act. In the course of its duties, SAQA has so far published legislation regarding the following (Beekman 2004:23-30; Boughey 2004:6-20; Council on Higher Education 2002:18-23; Geyer 1997:10-16; Olivier 2002:8-27; SAQA 2006; SAQA 2007; South Africa 1995):

- The National Qualifications Framework (NQF) is a set of principles and guidelines for recording a learner's achievement, which enables national recognition of acquired skills and knowledge and helps ensure an integrated system that encourages life-long learning.
- The National Standards Bodies (NSBs), Expert Consultative Panels with Qualifications and/or Quality Assurance Councils (QCs) are responsible for developing learning or career pathways by generating and recommending qualifications and standards for registration on the NQF in their particular area of learning or organising field, respectively for higher education and nursing education. They are also responsible for identifying sub-fields of learning for which the Standard Generating Bodies are responsible. The sub-fields relevant to this study are nursing science and higher education.
- The Standards Generating Bodies (SGBs) are recognised by or established by the NSB / QC. The SGBs are responsible for developing the standards and qualifications of a particular sub-field of learning, in this case the SANC for nursing science, and the Higher Education and Training SGB for higher education and tertiary institutions.
- The Education and Training Quality Assurance bodies (ETQAs) are responsible for accrediting providers of education, training standards and qualifications registered at the NQF, monitoring supervision, evaluating assessment, facilitating moderation and registering assessors. A Sectoral Education and Training Authority (SETA) can be established within a specific economic sector to execute the functions of an ETQA if accredited by SAQA for that purpose. The Higher Education Quality Committee (HEQC) is the SETA for higher education, while the SANC is the SETA for nursing.

3.2.2.1 Aim of education

The aim of education according to SAQA is lifelong learning, and the underlying philosophy of the prescribed NQF is outcomes-based education (OBE). SAQA stipulates that "the learning

outcomes of all South African qualifications should include critical cross-field or generic skills to promote lifelong learning as well as discipline, domain-specific or specialised knowledge, skills and reflexivity" (Ministry of Education 2004:7).

The concept of 'lifelong learning' is used synonymously with 'autonomy of learning' and refers to the extent to which a learner can undertake action for learning independently, takes responsibility for his/her own learning and is self-reflexive about and can evaluate the quality of his/her learning and eventually that of others (Council on Higher Education 2002:49).

The education of reflective neonatal nurses conforms with this aim, since lifelong learning is a characteristic of a reflective practitioner (Hillier 2002:22-25; Rolfe 2000:90-92; Van Aswegen *et al.* 2000:128-134); neonatal nursing is domain-specific and implies specialised knowledge and skills (Carter 1998:xix-xx; SANC 1993d & e; SANC 2000:1-2); and reflexivity is a cornerstone of reflective practice (Atkins & Murphy 1993:1189; Greenwood *et al.* 2000:1106; Pappas & Walker 2004:116; Rolfe 2000:155-163; Van Aswegen *et al.* 2000:126).

3.2.2.2 Outcomes-based education (OBE)

OBE is the underlying philosophy of South Africa's NQF. "Outcomes-based learning is learning that is based on what learners can demonstrate after their learning…. The objective with outcomes-based learning is to empower learners to fit into society at large, to think critically and to meet the needs set within the world of work" (Olivier 2000:1).

Outcomes-based teaching includes facilitation and guidance of the students to achieve outcomes through a series of learning processes, including assessment, in which the learner is an active participant (Olivier 2002:6; Beekman 2004:32). It implies splitting outcomes or results of learning from input of content (Geyer 1997:12).

Outcomes refer to the end-products of a learning process, that part of a unit standard which is a statement of the required learner capabilities that must be demonstrated. Outcomes can include social and personal skills, learning how to learn, concepts, knowledge, understanding, methodologies, values, attitudes and more (Geyer 1997:12).

According to SAQA, three types of outcomes can be distinguished in outcomes-based programmes:

- **Critical outcomes:** 'soft' or intangible outcomes that drive all learning processes and enable learners to achieve competences in more than one sphere of life, for example critical and lateral thinking, problem solving, life skills and the ability to effectively interact with others;
- **Specific learning outcomes:** knowledge, skills and values of relevance to a specific context; and
- **End-product outcomes:** final outcomes formed by critical and specific outcomes as a unity (Olivier 2002:32-33).

Competences are developed when a learner has met the criteria that show he/she has achieved the outcomes for required unit standards. Credits are awarded if competence is proven. Specified combinations of credits have to be accumulated to obtain a particular qualification (Geyer 1997:13).

The OBE-approach was not officially part of South African higher education in the past. The differences between traditional education and OBE are shown in Table 3.1 to demonstrate the paradigm-shift required in higher education and legalised by SAQA and the NQF.

Table 3.1: Differences between traditional education and outcomes-based education (OBE)

ASPECT OF EDUCATION	TRADITIONAL EDUCATION	OBE
Centre or focus of learning	The <u>content</u> of the curriculum and facilitating the transfer of these facts and skills, with the assumption that the learner will be able to apply them when and where needed (content-based), as well as the role of the <u>educator</u> and the use of <u>training objectives</u>	The <u>learner</u> and what it essential for him/her to be able to do (<u>performance</u>) at the end of the learning experience, therefore to enable him/her to manage his/her own learning to obtain, understand and employ it to achieve <u>learning outcomes</u> (outcome-based)
Measures of success	The number of students admitted to and successfully completing the courses; successful completion is based on proof during a summative or final assessment of knowledge and skills obtained, and not necessarily growth or effectiveness	The outcomes achieved by the learner that reflect learning of knowledge (concepts, principles and theories) complex skills, values / moral principles, psychosocial skills (motivation and relationships), all demonstrated as growth and effectiveness
Appeals process	Appeals process not necessarily present	Appeals process in place and accessible to students

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Table 3.1: Differences between traditional education and OBE (continue)

ASPECT OF EDUCATION	TRADITIONAL EDUCATION	OBE
Role and methods of assessment	Assessment is an 'add-on' experience, where students learn for assessment	Assessment encourages and supports deep learning, where students learn from assessment
	Assessment is not transparent but rather private and confidential; little or no feedback regarding the assessment	Assessment is a transparent process
	Assessment is the 'final judgement' to see if the desired subject-related knowledge and skills have been obtained, with the focus on accumulation of isolated or discrete facts and skills (text-book knowledge, implicit criteria and academic exercises) (behavioural approach)	Assessment is an expanded opportunity to achieving the desired developmental, critical cross-field and specific outcomes, with the focus on integrating and applying knowledge (use of knowledge in real life, public criteria for assessment and meaningful tasks) (cognitive / reflective approach)
	Assessment is almost entirely summative as an examination, separate from instruction, with a final explanation; the educator is the sole and unconditional judge of the learner' achievement	Various methods of assessment are incorporated with instruction; feedback is seen as an important component of instruction in which students participate; supports 'deep learning' and not reproduction of knowledge
	Assessment is mainly done on an individual basis and results are mostly kept secret	Group assessment of collaborative learning and skills and collaborative products
Recognition of an assessor	Assessment is simply included in a person's job description and requirements, either explicitly or implied	Every assessor must be a registered assessor, according to SAQA guidelines and meet ETQA requirements
Assessor's role / aim	'Gate-keeper': stop 'losers' from continuing	'Supportive guide': provide access to further development for all students
	Planning and developing the contents of a curriculum and methods for assessing the obtained knowledge and skills	Planning and developing clear learning outcomes and methods for enabling and encouraging students to achieve them, implementing these and assessing this implementation and achievement
Criteria for an assessor	Required expertise in the subject matter determined by the regulatory body and/or employer of the assessor	Required expertise in the subject matter must be at least the same qualification or in the same 'family' as that for which the learner is studying, according to NQF levels
	Required occupational and contextual expertise determined by the regulatory body and/or employer of the assessor	ETQA determines required occupational and contextual expertise in field of assessment and evaluates individual assessors
	Required expertise in subject education, training and development determined by the regulatory body and/or employer of the assessor	ETQA determines assessor's expertise within its primary focus (years of experience, expertise in education, training and development etc.)
	Required skills in planning, administration and management determined by the regulatory body and/or employer of the assessor	SAQA sets generic standards for skills in planning, administration and management
	Required values and interpersonal skills determined by the regulatory body and/or employer of the assessor	SAQA sets generic standards for values and interpersonal skills
Assessment system	Assessment system rigid and does not often change	Assessment system evolves and changes as new unit standards and assessment criteria are developed

(Sources: Beekman 2004:16-18, 31-38; Olivier 2000:2-3, 6, 26-28; Gravett & Geyser 2004: 44-45, 90-91,144-146)

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In OBE, though the educator plays a significant role in facilitating and guiding the learner to achieve these outcomes, self-learning is crucial. Olivier (2002:5) states that

> Self-learning competence is a critical key for each lifelong learner to have. Self-learn competence enables learners to value the learning by means of processes and practices that will enable them to become critical, lateral and creative thinkers. This implies that the way learning is provided, needs to move closer to what the real world wants, especially because legislation is emphasizing continuous and lifelong learning.

An integrated learning process is used to achieve outcomes. Knowledge and skills are contextualised and used as supportive tools for the learning steps that must be made towards the end-products, the outcomes. These learning steps are preparation (planning / development), performance (implementation), interaction (communicate / use of technology or information), assessment and conclusion (evaluation) (Olivier 2002:49-58).

The role of the educator is primarily that of facilitator. Before this facilitation can begin the educator has to identify learning outcomes and critical outcomes, formulate end-product outcomes, plan how to engage students in learning, establish appropriate assessment criteria, develop learning material and plan and schedule learning experiences. During facilitation the educator has to facilitate group and individual learning, council, guide and monitor the learning progress, create an environment for active participation, identify and respond to learner needs, explain difficult concepts and coach students by instructing, demonstrating and challenging them to improve, assess achievement of outcomes as a continuous process and give meaningful feedback. The educator has to decide which learning styles and methods are most helpful for supporting learning in a particular context (Olivier 2002:101-112).

Outcomes-based training uses a similar approach to prepare a person for a specific job or context. The outcomes of the programme are based on the requirements of the particular context, situation or job in real-life and are often performance indicators related to the job. Outcomes-based training therefore has an implicit practical component (Council on Higher Education 2002:31; Olivier 2002:113-148).

In outcomes-based training, the student has to achieve applied competences. Three types of applied competences are defined by the South African higher education system:

- **Practical competences:** the demonstrated abilities, in an authentic context, to consider a range of possibilities for action, to make considered decisions about which possibility to follow, and to perform the chosen action;

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- **Foundational competences:** the demonstrated understandings of the knowledge and thinking that underpins the actions taken;
- **Reflexive competences:** the demonstrated abilities to integrate and connect performances and decision making with understanding and with an ability to adapt to unforeseen circumstances, and to explain the reasons behind such adaptation (Council on Higher Education 2002:48-49; Geyser 2004b:139-156)

The concept of 'autonomy of learning' is associated with 'applied competences' and refers to the learner's capacity for lifelong learning. The learner must progress from dependence on others to full self-regulation, and from close supervision to creative, self-directed learning and the ability to supervise the learning of others (Council on Higher Education 2002:49).

Early South African post-basic neonatal courses were all based on a traditional teaching approach and need to be revised to conform with the outcomes-based format required by SAQA, which involves practical, foundational and reflexive competences and aiming at lifelong learning. Development of reflective neonatal nurses is therefore supported by the OBE approach.

3.2.3 National Qualifications Framework (NQF)

The NQF, legalised by the SAQA Act (Act no. 58 of 1995), is a set of principles and guidelines for recording a learner's achievement, to make national recognition of acquired skills and knowledge possible and ensure an integrated system that encourages life-long learning (Beekman 2004:24). It is a tool with which to manage what is happening in education and training in the country (Geyer 1997:11).

The main goals of the NQF are to standardise the quality of qualifications, not limited to formal education, based on the principles of OBE and lifelong learning (Boughey 2004:7-11).

The aims of the NQF are the following (Beekman 2004:23-30; Boughey 2004:6-20; Geyer 1997:10-16; Olivier 2002:8-27):

- **Integration:** to form part of a system of human resources development which provides for the establishment of a unifying approach to education and training;
- **Articulation:** to allow students, on their successful completion of accredited pre-requisites, to move between components of the delivery system;

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- **Flexibility:** to allow for multiple pathways to the same learning ends;
- **Access:** to ensure ease of entry to appropriate levels of education and training for all prospective students in a manner which facilitates progression;
- **Progression:** to ensure that the framework of qualifications permits individuals to move through the levels of national qualifications via different appropriate combinations of the components of the delivery system;
- **Coherence:** to work within a consistent framework of principles and certification;
- **Portability:** to enable students to transfer credits of qualification from one learning institution and/or employer to another;
- **Recognition of prior learning:** to assess learning that has already taken place and to give credit for it;
- **Guidance of students:** to provide counselling for students by specially trained individuals who need nationally recognised standards for educators and trainers;
- **Standards:** to express education requirements in a nationally agreed framework and internationally acceptable outcomes;
- **Relevance:** to be and remain responsive to national development needs;
- **Credibility:** to maintain international and national value and acceptance; and
- **Legitimacy:** to enable the participation of all national stakeholders in the planning and coordination of standards and qualifications.

The NQF levels for the different qualifications are schematically presented in Table 3.2.

Table 3.2: NQF for higher education

NQF LEVEL	TYPES OF QUALIFICATIONS AND CERTIFICATES
NQF levels 5-10: Higher Education and Training	
10	Doctoral Degree
9	Master's Degree
8	Honours Degree Postgraduate Diploma
7	Bachelor's Degree Advanced Diploma
6	Diploma Advanced Certificate
5	Higher Certificate
NQF levels 2-4: Further Education and Training (FET)	
NQF level 1: General Education and Training Certificate	

(Source: adapted from Ministry of Education 2006)

For approval and registration at SAQA, qualifications have to be outcomes-based and comply with the NQF aims listed above. The qualifications must be submitted in SAQA format, specify

their NQF level and include the following (Beekman 2004:23-30; Ministry of Education 2006:9-14; Olivier 2002:8-27; Boughey 2004:6-20):

- title and purpose of the qualification;
- unit standards;
- critical cross-field outcomes to promote lifelong learning, and discipline, domain-specific or specialised knowledge, skills and reflexivity;
- specific outcomes of the fundamental elements, core elements and elective elements;
- exit-level outcomes and associated assessment criteria, including embedded knowledge;
- accreditation process, including moderation of unit standards;
- range statements as a general guide to the scope, context and level used for the unit standards or specific outcomes or assessment criteria;
- credits attached to the unit standards;
- rules of combination for the learning outcomes of a qualification;
- entry requirements;
- arrangements for recognition of prior learning; and
- moderation of assessment.

All persons involved with assessing the qualification have to be registered assessors at SAQA, while persons involved in moderating the qualification or a part thereof have to be registered moderators. Registering at SAQA requires evidence of compliance with prescribed criteria (Beekman 2004:1-20; Geyser 2004a:90-111; Murdoch & Grobbelaar 2004:112-125). The terminology used to describe SAQA format is clarified in Table 3.3.

Table 3.3: SAQA and NQF terminology

Terminology	Description
Programme	A purposeful and structured set of learning experiences or course that leads to a qualification. Programmes may be discipline based, professional, career-focused, trans-, inter- or multi-disciplinary in nature. A programme has recognised entry and exit points. All taught higher education programmes should have core and elective elements, except research-based programmes.
Professional programme	A programme that has to meet the licensure and other professional and work-based requirements of statutory councils
Recognised higher education institution	A higher education institution which has formal approval in terms of the Higher Education Act, no. 101 of 1997, to operate as a public or a private institution of higher education in South Africa
NQF levels	Classification or categorisation of qualifications on the NQF, of which higher education qualifications occupy levels 5 to 10: undergraduate levels 5 to 7 and postgraduate levels 8-10 (refer to Table 3.2)

Table 3.3: SAQA and NQF terminology (continued)

Terminology	Description
Level descriptors	Broad qualitative statements against which more specific learning outcomes can be compared, or the outermost layer of qualification specification that indicates the general level of outcomes
Qualification	Formal recognition and certification of learning achievement of a range of credits embodied in a coherent number of standards, awarded by an accredited institution, and as registered by SAQA
Qualification type	First name given to a qualification, e.g. Master's degree
Qualification designator	Second name given to a qualification to indicate broad area of study, discipline or profession, e.g. Master of Nursing Science, abbreviated as M.Cur
Qualifier	Third name given to a qualification to indicate field of specialisation, e.g. M.Cur (Advanced Neonatal Nursing). To merit a qualifier, at least 50% of the minimum total credits for the qualification and at least 50% of the minimum credits at the qualification's exit level must be in the field of the specialisation
Qualification descriptors	Fixed points of reference which enable comparison with other qualifications and provide a basis for designing, approving and reviewing programmes. Descriptors specify a qualification's level, credit-rating, purpose and characteristics or type
Entry requirements	Minimum requirements expected from a learner for admission to a higher education programme, as prescribed by the Department of Education (2005:2-10), and interpreted in the higher education institution's admissions policy and practice
Credits	A measure of the volume of learning required for a qualification, quantified as the number of notional study hours required for achieving the learning outcomes specified for the qualification. One SAQA credit equals 10 notional hours, and 120 SAQA credits are approximately equivalent to one year full-time study
Notional hours of learning	Learning time the average learner will take to meet defined learning objectives, including contact time, time spent in structured learning in the workplace and time spend in individual learning
Unit standards	Nationally agreed and comparable statements supported by specific outcomes and their associated assessment criteria together with other relevant information. The standards are the basis on which to develop learning programmes, prepare for learning interventions and material and develop assessment documents. "Learning takes place *towards* a unit standard, whilst assessment takes place *against* the unit standard" (Olivier 2002:24).
Critical cross-field outcomes	Generic skills supportive of life-long learning, as well as discipline- or domain-specific or specialised knowledge, skills and reflexivity, which are designed by SAQA and are applicable to all learning areas
Specific outcomes	Contextually demonstrated knowledge, skills and values
Exit-level learning outcomes	Outcomes or end-products to be achieved by a qualifying learner at the point at which he/she leaves the programme, leading to a qualification
Range statements	Statements of the complexity, technological involvement, dimension, scope, depth and other parameters of the unit standard. They are expansions, clarifications, descriptions and explanations of the assessment criteria, and direct choice of learning strategy, material and assessment methods whilst ensuring balance between the acquisition of knowledge, skills, values *(How to?)*
Assessment	Systematic evaluation of a student's ability to demonstrate the achievement of the learning goals intended in a curriculum
Accreditation	Recognition status granted to a programme for a stipulated period of time after an HEQC evaluation indicates that it meets minimum standards of quality

Table 3.3: SAQA and NQF terminology (continued)

Terminology	Description
Moderation of assessment	Process in which a person (not the examiner) appointed by the institution checks the standard of the examination, accompanying marking framework and response exemplars and marks a representative sample of examination responses
Recognition of prior learning	Formal identification, assessment and acknowledgement of the full range of a person's knowledge, skills and capabilities acquired through formal, informal or non-formal training or on-the-job or life experience
Work integrated learning	Qualifications designed to incorporate periods of required work that integrate with classroom study; work must be appropriately structured, properly supervised and formally assessed by the institution responsible for the programme

(Sources: Department of Education 2005:2-10; Higher Education Quality Committee 2004:33-37; Ministry of Education 2006:4-17; Ministry of Education 2004:7-16; Olivier 2002:1-27)

3.2.3.1 Higher education qualification descriptors

Descriptions of learning move from the generic to the specific, with specific standards meeting the requirements of generic standards. The *NQF level descriptor* is the generic layer of a qualification. The *qualification descriptor* specifies the qualification type, its minimum credit rating and its purpose and characteristics. The *qualification types* are used as points of reference for the design of specialised qualifications and the programmes that deliver them. The *designated variant* is a generic field of study, and the *qualification's qualifier* a field of specialisation (Council on Higher Education 2002:33-38; Ministry of Education 2006:10-12).

Table 3.4 is adapted from the 'Diagrammatic representation of a nested approach to qualification specification' released by the Ministry of Education (2006:29). Application in this study is indicated in italics.

Table 3.4: Higher education qualification descriptors in neonatal nursing education

NQF Level (level descriptor): *Levels 7, 8 & 9*

> **Qualification type** (qualification descriptor):
> NQF Level 7: *Advanced Diploma / Bachelor's Degree*
> NQF Level 8: *Postgraduate Diploma*
> NQF Level 9: *Master's Degree*
>
> > **Designated variant** (designator):
> > Advanced Diploma *(Dipl. Nursing Science)*
> > Bachelor of Nursing Science *(B.Cur I et A)*
> > Master's Degree in Nursing Science *(M.Cur)*
> >
> > > **Qualification specialisation** (qualifier):
> > > Dipl. *Neonatal Nursing Science*
> > > B.Cur I et A *(Neonatal Nursing Science)*
> > > M.Cur *(Adv. Neonatal Nursing Science)*

(Source: adapted from Ministry of Education 2006)

3.2.3.2 Higher Education Information Management System (HEMIS)

The details of approved and accredited qualifications are recorded on the national higher education database, in accordance with the rules of the Higher Education Information Management System (HEMIS) of the Department of Education (Ministry of Education 2006:17).

The minimum notional annual study hours for a qualification are reflected in the HEMIS record. Notional annual study hours are based on the volume of learning required for a qualification and its specified exit level. Notional annual study hours are used to determine the total number of units of government subsidy per qualification. These units are then used by the Department of Education to calculate the annual government grant for each public higher education institution (Ministry of Education 2006:17). With 1 credit = 10 notional hours, the minimum credits required for the registration of a qualification are: 120 credits for a National Certificate, 240 credits for a National Diploma and 360 credits for a National First Degree (Council on Higher Education 2002:22).

The Department of Education will only fund whole qualifications and not individual unit standards, short courses or parts of qualifications (Council on Higher Education 2002:32). The HEMIS national database and its rules therefore have significant financial implications for the higher education institutions presenting such courses.

3.2.4 National Standards Bodies (NSBs), Expert Consultative Panels, and Qualifications and Quality Assurance Councils (QCs)

NSBs were initially established and some were later replaced by Expert Consultative Panels to recommend the boundaries of the field in which a qualification specialises, as well as a framework for the sub-fields. They oversee the activities of the SGBs, recommend qualifications to SAQA, recommend registration of standards to the NQF, and liaise with the ETQAs on the procedures for recommending new standards and qualifications (Olivier 2002:15-18).

Acknowledgement of the need for further adjustments led to SAQA proactively engaging partners in mapping out a standards generating approach to better meet the needs of all constituencies. Recommendations are made by the Task Team, but are not yet implemented, to dismantle and replace the NSB structure or the Expert Consultative Panels with Qualifications and Quality Assurance Councils (QCs). The purpose of the QCs would be to represent the proposed pathways, namely TOP QC for the Trade, Occupation and Professional Pathway, GENFET QC for the General and Vocational/Career Pathways in Further Education, and HI-ED for the General and Vocational/Career Pathways in Higher Education (Young 2003:1-20).

Of relevance to this study are Education, Training and Development (NSB 05) or General/Career Pathways in Higher Education (HI-ED); and Health Sciences and Social Services (NSB 09) or Trade, Occupation and Professional Pathway (TOP QC). These serve as particular areas of learning or organising fields (Gravett & Geyser 2004:11-12; Young 2003:1-20). The relevant sub-fields of learning are 'Higher Education' and 'Nursing'.

3.2.5 Standards Generating Bodies (SGBs)

SGBs develop the standards and qualifications of the particular sub-field of learning. The SGB for higher education is the Higher Education and Training SGB, and for nursing is the appointed SGB for Nursing.

3.2.5.1 Higher Education and Training Standards Generating Body (HET SGB)

The HET SGB is the SGB for higher education, responsible for generating standards and qualifications in accordance with SAQA requirements, updating and reviewing these standards, recommending standards and qualifications to the Education, Training and Development National Standards Body (ETD NSB) and recommending criteria for the registration of assessors and moderators or moderating bodies (Olivier 2002:18). The HET SGB developed the Postgraduate Certificate in Higher Education and Training (Gravett & Geyser 2004:11-12).

3.2.5.2 SGB for Nursing

The SGB for Nursing is appointed with the purpose of generating standards and qualifications in accordance with SAQA requirements, updating and reviewing these standards, recommending standards and qualifications to the NSB 09: Health Sciences and Social Services, and recommending criteria for the registration of assessors and moderators or moderating bodies, which they have submitted in 2005 for nursing qualifications. The appointed SGB for Nursing includes members from the SANC to ensure that nurses who complete these qualifications are able to fulfil the requirements for registration with the SANC (SAQA 2007a:1-2).

The SANC determines entrance requirements to the register for nurses and midwives and therefore participates in the process of standard setting and builds on the work of the SGB to ensure that requirements for its competency framework are met in accordance with the scopes of practice of the profession and the nurses. The registration of the nursing qualifications has been overtaken by the publication of the Nursing Act, Act no. 33 of 2005 (South Africa 2005a), and the subsequent proclamation of certain sections of this Act. One of these sections is the scope of practice in section 30 which required the SANC to develop new qualifications to prepare nurses for the proposed new scope of practice. The SANC task team working on

theses new qualifications have used the SGB materials submitted to SAQA to assist the process.

The difference between the role of the SANC and the role of the SGB is that SANC sets the minimum criteria for registration as nurses while the SGB develops the qualification (South Africa 2005a; SAQA 2007a:1-2). The implication thereof is that the processes are running concurrently to obtain a qualification and qualify for licensing to practise as a nurse, in comparison with other countries where it often implies two independent processes.

The NSBs, Expert Consultative Panels or QCs and SGBs together provide a framework for education. The Education and Training Quality Assurance bodies (ETQAs) and Sectoral Education and Training Authorities (SETAs) oversee the quality of service delivery according to this educational framework.

3.2.6 Education and Training Quality Assurance bodies (ETQAs) and Sectoral Education and Training Authorities (SETAs)

ETQAs accredit providers of education and training standards and qualifications registered at the NQF, monitor supervision, evaluate assessment, facilitate moderation and register assessors. A SETA can be established within a specific economic sector to execute the functions of an ETQA if it is accredited by SAQA for that purpose. In practice, ETQAs and SETAs have become synonymous (Gravett & Geyser 2004:12; Olivier 2002:19-21).

The Council on Higher Education is the ETQA/SETA for higher education. The SANC is a ETQA/SETA for nursing (stipulated in section 4(o) of the Nursing Act, Act no. 33 of 2005), although the Health and Welfare SETA (HWSETA) is also involved in aspects of education and training programmes offered at nursing schools (Gravett & Geyser 2004:12; SAQA 2007b:11-14).

3.2.6.1 Council on Higher Education (CHE) and Higher Education Quality Committee (HEQC)

The CHE established a permanent sub-committee, the HEQC, following as stipulated in the Higher Education Act, no. 101 of 1997 (South Africa 1997). The mandate of the HEQC is to promote quality assurance in higher education, audit the quality assurance mechanisms of

higher education institutions and accredit programmes of higher education. The central objective of the HEQC is "to ensure that providers deliver education, training, research and community service which are of high quality and which produce socially useful and enriching knowledge as well as a relevant range of graduate skills and competences necessary for social and economic progress" (Higher Education Quality Committee 2004c:1).

The responsibilities of the HEQC involves collaboration with professional councils and SETAs on the accreditation and evaluation of professional and work based programmes leading to NQF-registered qualifications; the periodic audit of the effectiveness of quality assurance policies and systems of all public and private providers of higher education, with particular emphasis on quality assurance arrangements for teaching and learning, research and knowledge-based community service; and the project on *Guides to Good Practice* (Higher Education Quality Committee 2004c:7).

The focus of the *Guides to Good Practice* includes setting criteria and guidelines for (Higher Education Quality Committee 2004c:7): institutional policies and strategies for improving teaching and learning; programme design and review; evaluation of teaching; equity; access; academic development and curriculum innovation; the alignment of curriculum with the assessment of students; postgraduate supervision; the role of external examiners; and academic staff development. These documents support the aim of assuring quality delivery of service.

3.2.6.2 SANC as ETQA/SETA for nursing

SANC is accredited as an ETQA for nursing (stipulated in section 4(o) of the Nursing Act, Act no. 33 of 2005) with the following functions: accredit providers of nursing programmes; promote quality amongst constituent providers; monitor nursing programmes; evaluate assessment and facilitate moderation amongst constituent providers; register constituent assessors for unit standards and qualification falling within its primary focus; certificate students; co-operate with relevant moderating bodies; recommend new standards or qualifications to the SGB for Nursing or modifications to existing standards and qualifications; maintain a database of students, providers, etc.; and submit reports to SAQA (SAQA 1999; SAQA 2007a; SAQA 2007b). The focus remains on assuring quality delivery of service in nursing and education.

3.2.7 Skills Development Act and Skills Development Levies Act, no. 9 of 1998

Two other influences on higher education in South Africa are the Skills Development Act, no. 97 of 1998 (South Africa 1998) and Skills Development Levies Act, no. 9 of 1999 (South Africa 1999). They emphasise the obligation of employers to support the continuous development of their employees to meet the country's need for highly skilled employees, improve the skills and productivity of the South African workforce and to utilise the workplace more effectively for skills training. Employers have to pay a specified levy on the wage bills of all employees. These funds are channelled into skills development by the SETAs. Employers can reclaim a part of the levy paid annually if they can prove that they support skills development; this proof must be a Workplace Skills Plan and a Workplace Skills Report submitted to the relevant SETA.

All the SETAs are accredited as ETQAs with SAQA and are expected to measure quality against set standards. Because many sub-fields do not have such standards, some SETAs fund selected standard setting processes in their sectors, for example the HWSETA that funds the activities of the Nursing, Ancillary Care Workers and Phlebotomy SGBs in the form of learnerships and bursaries. Learnerships facilitate the combination of a structured learning component and practical work experience that lead to a qualification. A learnership requires that a contract be established and signed between the learner, the employer and the accredited training provider. While the training provider provides the training facilities, the employer must ensure that the learner receives payment, support, and supervision to implement learning content, workplace policies and procedures and fulfil the learning objectives of the programme. That learner has the obligation to attend the training and to work for the employer adhering to the required workplace policies. These learnerships and bursaries have opened doors for agreements between tertiary institutions and employers for training of more nurses in certain specialities identified as priorities. Some employers have also initiated in-service-training opportunities or developed short in-house courses (Boughey 2004:17-18).

Due to the lack of qualified neonatal nurses in South Africa, various health care institutions have identified the training of neonatal nurses as a priority. Certain provincial governments, such as those of Mpumalanga and Limpopo, are paying a 'scarce skill allowance' to neonatal trained nurses. Private hospital groups have developed short courses in neonatal nursing, or made agreements with tertiary institutions for post-basic training of selected nurses in neonatal nursing. As a result of these measures the demand for training of neonatal nurses

has increased, and courses became more accessible for registered nurses with the support of the employers.

3.2.8 Additional influences in higher education

Other influences in higher education that also influence neonatal nursing education include globalisation, massification and internationalisation; sizing and shaping of the higher education landscape; and the focus of the Department of Education.

3.2.8.1 Globalisation, massification and internationalisation

Globalisation, massification and internationalisation are changes that influence the future of higher education. Globalisation causes education systems to emphasise the contemporary technological, social and cultural needs and problems of bigger communities. Massification, which is linked to globalisation, is the phenomenon of increasing student numbers in higher education because of increasing accessibility and support, especially of disadvantaged students. Internationalisation forces higher education systems to consider international trends and the needs of international societies (Botes 1997:3-9; Council on Higher Education 2002:7-8, 26; Geyser 2004b:140-142; SAQA 2007c:17).

These three trends go hand-in-hand with contemporary changes, including:
- the explosion of knowledge and its accessibility,
- technological advancements in communication and connectedness,
- increased mobility and changing immigration patterns of skilled professionals,
- changes in the employment arena, and
- support from national and international organisations for globalisation and internationalisation.

(Council on Higher Education 2002:7-15; De Villiers 2005:63; Goodyear 2006).

Therefore, a recurrent theme in South African higher education programmes is the need to be internationally accepted and accord with international trends in terms of quality and standards while addressing the needs of the South African society (Department of Health 2006:8, 11; Geyser 2004b:141; Pandor 2005; SAQA 2006:1-11) and supporting African rejuvenation (Council on Higher Education 2001:5-6).

One of the HEQC's responsibilities is international liaison, namely

membership of and the development of linkages with international quality assurance organisations and networks in order to share information as well as participate effectively in international debates and initiatives on quality provision and articulation in higher education across national boundaries. (Higher Education Quality Committee 2004c:1)

This international involvement demands of higher education, including neonatal nursing education, the training of practitioners with greater operational knowledge and internationally recognised qualifications. This cannot be achieved by traditional education or 'routinised' neonatal nurses, but is possible with the education of reflective neonatal nurses.

The need for reflective practitioners is clearly supported in the following statement of the Council on Higher Education (2001:6):

Higher education can also contribute meaningfully to improving the quality of schooling, health care, welfare and other public services at national, provincial and local levels. This requires the active promotion of continuing education, the upgrading of professional knowledge and skills and [the] creating [of] flexible opportunities for life-long learning for practical education, health, social services and other public sector personnel. It also requires the appropriate applied and strategic research around key social policy issues and the problems of social reconstruction and development. Such research and the continuous upgrading of the knowledge, skills and competences of public sector personnel will ensure effective delivery of services as well as innovation and new trajectories for development.

3.2.8.2 Changes in the South African higher education landscape due to resizing and shaping

The higher education landscape has been resized and shaped to meet national goals, in the global context, through collaboration at regional level in programme development, delivery and rationalisation. This restructuring process involved reduction of the number of tertiary institutions and creating a new type of 'comprehensive' institution that offer both technikon-type and university-type programmes (Ministry of Education 2004).

The rationale of this restructuring process was explained in the January 2004 document, 'Creating comprehensive universities in South Africa: a concept document' (Department of Education 2004). The main goals of the restructuring include

access to higher education, enhanced articulation between career-focused and general academic programmes, thus promoting student mobility; strengthening of applied research;

and enhanced responsiveness to regional and national human resource, skills and knowledge needs. (Asmal 2004:Foreword)

The restructuring of the higher education system began in 1994 and is still a high priority; an estimated R1,9 billion is budgeted for this purpose from 2001/2 to 2006/7 (Pandor 2005).

Thus the curriculum for neonatal nursing education must be revised if it is to remain relevant and appropriate for the changing needs of the society, and comply with new legislation and current trends.

3.2.8.3 Focus of the Department of Education on enrolment of students

During her speech to the National Assembly on the 17 May 2005, Pandor, Minister of Education, emphasised that the main focus of the Department of Education remains the quality of education. She identified six core issues to be addressed to ensure quality of education, which she called the "six doors of learning and culture that are difficult to open or that offer restricted access to what lies within. Each of these features of learning and culture requires decisive, effective, and coherent responses from us as policy makers and implementers in the field of education." The first three 'doors' relate to pre-school and school matters, and the last three to higher education, namely 'higher education enrolment planning', 'further education and skills for a modern economy' and 'opening the hidden access to adult education' (Pandor 2005). These latter three will now be briefly discussed.

Higher education enrolment planning is needed because the growth in student numbers must not outstrip the availability of resources if quality education is to be provided. A result of massification is increased numbers of students enrolling, but decreased numbers of successful graduates, which means a high rate of student dropout and a waste of resources. Pandor (2005) stated in her speech that

> Our success in the sector will be assured through planned enrolment, planned growth and improved sectoral co-operation. An efficient, adequate, well-resourced and responsive system of higher education is an attribute for any society… We must determine our path of growth in access and ensure that the revolving door becomes a door of increased opportunities and skills.

Providing *further education and skills for a modern economy* will require the development of more skills, elimination of unnecessary duplication in programme offerings, provision of

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

education relative to the skill shortages in the country and design of education that contributes to the national human resource development strategy and promotes economic growth.

Opening the hidden access to adult education will require increased provision of adult basic education and training (ABET) to increase adult literacy, which will contribute to increased numbers of student enrolment in higher education in the long term (Pandor 2005).

Though these may be valuable aims, their practical implementation can cause problems. One difficult implication for neonatal nursing education is the probability that the enrolment of students from different educational backgrounds will increase; these students often suffer the effects of unequal education, and an uneven knowledge base. Innovative teaching strategies might be needed to help all students cope and become reflective neonatal nurses.

3.2.8.4 *Focus of the Department of Education on health science education*

The Minister of Education in a speech at the National Conference on the Financing of the Health Sciences Education on 16 May 2005, in Cape Town, highlighted the following problems in the country's health system (Pandor 2005):

- The skew distribution of health professionals between the public and private sectors, with the public sector on the losing end;
- The escalating trend of health professionals leaving the country;
- The fundamentally flawed division of funding between pre-clinical training at national level and clinical training at provincial level;
- The failure of the demographic composition of student populations to change to meet the equity goals for higher education's transformation agenda;
- The drop in number of graduates despite increasing student enrolment numbers, suggesting that appropriate support programmes have to be put in place to ensure that access is coupled with success; and
- Tension between the teaching and research mandates of higher education institutions and the service delivery needs of the provincial health departments, causing problems for health professionals in joint appointments. (Joint appointments refer to posts shared between a university and a provincial government in South Africa).

Speaking about the curricula followed in South African faculties of health sciences, the Minister said

> if we are to be successful in addressing the health problems that face the country, health professionals must not only be trained to deal with the clinical or health aspects of these problems but also the social, economic and cultural context within which they occur. We need to develop curricula that not only create a balance between preventive and curative health care, between primary, secondary and tertiary services, but also develop the social, communication and managerial skills necessary for health care workers to function effectively in the South African context …The changes in the curricula must also be accompanied by the development of multiple training sites – in urban and rural areas, suburbia and the townships, thus exposing health professionals to the full range of conditions, experiences and needs of different communities. (Pandor 2005)

Neonatal nursing education fits these goals in the sense that it is career-focused and contributes to satisfying a national need for highly skilled human resources, but is also exposed to the challenges mentioned. A fine balance, though, has to be maintained between addressing the national context and remaining internationally relevant, while overcoming the obstacles in higher education. This balance will be achieved by the education of reflective neonatal nurses who are knowledgeable, skilful and reflexive.

3.2.9 Tertiary institutions

in the past, before 1994, traditionally tertiary institutions had academic freedom and autonomy, and their protection against arbitrary interference was underwritten by formal legislative enactments. These institutions were free to formulate their own definitions of excellence, innovation and the advancement of knowledge (Council on Higher Education 2001:7).

Recently (after 1994), however, globalisation, massification, privatisation, decentralisation, the needs of quality assurance and social changes have required broader concepts of accountability and obligations (Council on Higher Education 2001:7). Transformation is the order of the day in South African society, including tertiary institutions. Their role has been redefined, but remains of extreme importance for society in terms of intellectual development, institutional development and professional development (Botes 1997:3-9).

A compromise must be found between academic freedom and university autonomy on the one hand and notions of accountability and responsiveness to external interests on the other

(Council on Higher Education 2001:7). Changes brought about in efforts to find this compromise are briefly discussed below, with the application to education of reflective neonatal nurses in italics.

- The statutes of the tertiary institutions are drafted in accordance with section 32 of the Higher Education Act, no. 101 of 1997, and must be approved by the Minister of Education and published before becoming operational. *The statute of the University of Pretoria has been approved and was published as Government Notice of the Department of Education, no. 1830, Higher Education Act (101/1997): Statute of the University of Pretoria in the Government Gazette no. 25852* (South Africa 2003). *This statute specifies the structures and broad functions of the management of the university, the council, faculties, faculty boards, institutional forums, convocation, qualifications awarded, employees, students and donors. Any programmes presented at the University have to fit into the institutional framework set out in this statute.*

- The focus of research has shifted to collaboration between tertiary institutions and business, government and other socio-economic actors, with the aim of providing knowledge useful in the market place according to the needs of the community (Council on Higher Education 2001:8-9). *The market place in this case is hospitals with neonatal intensive care units and the community is the neonatal patients, their families and the relevant health care providers. The partnerships of relevance are between the university and health care facilities and interest groups.*

- Tertiary institutions are forced to come up with innovative strategic plans to be competitive players in the corporate world (Privateer 1999:60-79). *The University of Pretoria has developed a strategic plan for the period 2001-2005 entitled 'Inspiring the Innovation Generation', followed by a follow-up strategic plan for the period 2006-2010, which focuses on 'excellence in the University's academic endeavours, quality in everything we do, local impact, transformation, people, innovation, interfaces, and sustainability'* (University of Pretoria 2006:4-7)*.*

- An institution has to submit qualifications for approval to the relevant SETA / ETQA in the prescribed format and register them on the NQF (Beekman 2004:23-30; Ministry of Education 2004:7; Olivier 2002:8-27; Boughey 2004:6-20). *The qualifications in neonatal nursing science presented at present were submitted for approval to SAQA and the SANC in 1999-2000.*

- The institution does not have autonomy to decide on the quality and scope of a qualification, but as provider can design its own plan for ensuring that the educational offering complies with official requirements and meets the needs of the community they serve (Ministry of Education 2004:6). *The qualifications have been submitted to and*

approved by SAQA and the SANC. The curriculum however needs to be revised to meet the needs of the community, since at present it is based only on inherited sections of the traditional critical care, child nursing and advanced midwifery courses. One of the objectives of this study is to describe the actual needs of the community served by reflective neonatal nurses to revise the current plan, to be submitted again for approval by SAQA and the SANC.

- Tertiary institutions have to implement measures for quality assurance, in addition to using external examiners. These measures can include a meta-level coordination body, internal self-evaluation mechanisms, external peer review, publication of reports or indirect links to funding (Beekman 2004:23-30; Boughey 2004:6-20; Council on Higher Education 2001:10-12; Council on Higher Education 2002:18-23; Geyer 1997:10-16; Olivier 2002:8-27; SAQA 2007b:3-17; South Africa 1995). *Quality assurance mechanisms and activities at the University of Pretoria relevant in neonatal nursing education include external examiners, the Unit for Quality Assurance, intra-departmental activities of the Department of Nursing Science and the School of Healthcare Sciences (e.g. Examination Moderation Committee, Departmental and School's Research and Postgraduate Committees, and the School's Academic Advisory Committee), intra-faculty activities of the Faculty of Health Sciences (e.g. Ethics Committee, Academic Advisory Committee and Faculty Board), and the roles of the Senate, the ETQA of Higher Education and the SANC in approving and monitoring courses and clinical facilities.*

- Graduates must be able to use metacritical thinking, reason through abstract and symbolic codes, use inferential and synthetic thought and effectively manage group work, and have participated in inventive or constructivist design experience. Education programmes have to be adjusted to obtain these results (Council on Higher Education 2001:10). *These requirements are the foundation for the education of reflective neonatal nurses, and the main aim of this study is to develop a model for the education of reflective neonatal nurses and as a result, to revise the current neonatal nursing courses presented by the University of Pretoria.*

3.3 HEALTH IN SOUTH AFRICA

Influences other than those operating in the higher education system impact on neonatal nursing education. Factors from the health system contributes significantly, including the National Health Act, no. 61 of 2003, strategic priorities for the national health system, *Batho Pele* principles, National Human Resource Plan for Health (HRH Plan), New Partnership for

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Africa's Development (NEPAD) and the World Health Organization (WHO). These will be briefly discussed.

3.3.1 National Health Act, no. 61 of 2003

The National Health Act, no. 61 of 2003 (South Africa 2004:2-3) provides a framework for a structured, comprehensive and integrated approach to health care delivery so as to

> unite the various elements of the national health system in a common goal to actively promote and improve the national health system in South Africa,…establish a health system based on decentralised management, principles of equity, efficiency, sound governance, internationally recognised standards of research and a spirit of enquiry and advocacy which encourages participation…and…promote a spirit of co-operation and shared responsibility among public and private health professionals and providers and other relevant sectors within the context of national, provincial and district health plans.

The tertiary institution responsible for neonatal nursing education plays a part in this integrated approach as it contributes to the production of skilled practitioners. The neonatal nursing students are employees of either the public or private health care sector while they are busy with specialisation in neonatal nursing science, so various aspects of the National Health Act are relevant for tertiary institutions. Such aspects include especially stipulations concerning placement of students, clinical experience and programme content.

3.3.2 Strategic priorities for the National Health System 2004-2009

The Department of Health identified strategic priorities for the National Health System for the period 2004-2009. These priorities flesh out the Department's vision of "an accessible, caring and high quality health system", and their mission, which is "to improve health status through prevention and promotion of healthy lifestyles and to consistently improve the health care delivery system by focusing on access, equity, efficiency, quality and sustainability" (Department of Health 2004:5).

Initiatives significant for neonatal nursing education include (Department of Health 2004:5-15):
- The ICD-10 system adopted as the standard for disease coding in the public and private health sectors that has an impact on patient management with an emphasis on cost-effective care.

- The National Policy on Quality, adopted in 2001, which includes the public sector in its accreditation of health care facilities (the private sector has been involved with accreditation for several years already). This requires a focus on quality of care delivered based on the best current evidence.
- Revitalisation of public hospitals, which emphasise improved quality of care and professional growth.
- Decreasing of morbidity and mortality rates through strategic interventions, such as the Prevention of Mother-To-Child Transmission (PMTCT) programme, promotion of exclusive breastfeeding and attempts to decrease childhood infectious diseases.
- Awareness campaigns for HIV and AIDS and the implementation of the Comprehensive Plan for the treatment, management and care of HIV and AIDS. These expect of neonatal nurses to remain updated and informed.
- Implementation of community service for health care personnel, which implies that all health care personnel who has completed their basic training has to do a year community service before they can pursue a career.
- Internationalisation, of which the impact has been discussed earlier in this chapter.

The Directorate: Child and Youth Health of the Department of Health was established in 1999. One of its sub-directorates is Child Health, which as one of its strategic goals aims to improve the health status and decrease morbidity and mortality rates in neonates (Department of Health 2007:2-3).

Neonatal nursing education can contribute to these strategic priorities (Department of Health 2004:5-15; Department of Health 2007:2-3) by training knowledgeable and skilled reflective neonatal nurses who can be agents of change in:
- improving the quality of care offered to patients;
- promoting the rights of neonatal patients;
- decreasing morbidity and mortality rates through strategic interventions, specifically in matters of child health;
- strengthening hospital delivery systems; and
- contributing to the preparation and implementation of neonatal guidelines applicable to the South African context.

Neonatal nursing education can also contribute to strengthening international relations by including relevant information in its programmes and exploring opportunities for collaborative research projects.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

3.3.3 *Batho Pele* principles

The *Batho Pele* principles are a government initiative to improve the delivery of all governmental services to the public, including health service delivery. These principles are consulting users of services, setting service standards, increasing access, ensuring courtesy, providing more and better information, increasing openness and transparency regarding the management of services, remedying mistakes and failures and getting the best possible value for money (Department of Public Service and Administration 2000).

The *Batho Pele* principles are developed for the public sector. A large number of neonatal nursing students are employed in public health care services, and as reflective neonatal nurses would be able to contribute knowledge, skills and innovative strategies to improve the quality and cost-effectiveness of neonatal healthcare.

3.3.4 National Human Resource Plan for Health (HRH Plan)

The South African health system faces complex human resource demands created by the burden of global disease challenges, maldistribution of human resources between metropolitan and rural areas, and loss of skilled staff ('brain drain') to immigration. These problems have a significant negative impact on quality of health care. The HRH Plan was developed to address these matters and promote equity, efficiency and effectiveness in the health system (Department of Health 2006:6).

The core principles of the HRH Plan are as follows (Department of Health 2006:7-9):
- Stewardship for health care lies with the National Department of Health.
- South Africans must enjoy a reliable supply of skilled and competent health professionals for self-sufficiency.
- The planning and developing human resources linked to the needs and demands of the health system must be strengthened.
- The equitable distribution and use of skilled health professionals to promote equal access to health services must be optimised.
- Health workers must have the capacity and appropriate skills to render accessible, appropriate and high quality care at all levels.
- Work environments must be conducive to good management practice in order to maximise the health workforce's potential to deliver good quality health services.

- South Africa's role in international health issues contributing to leadership, scientific advances and global health professions is critical.
- South Africa's contribution, in the short to medium term, to the global health market must be managed in such a way that it contributes to the skills development of health professionals.
- Funding must be mobilised to ensure successful implementation of the HRH Plan.
- The Department of Health must ensure that it has the technical expertise necessary to lead health workforce planning.

Some strategies implemented in nursing to address these challenges aim to (Department of Health 2006:10-13):

- increase the numbers of basic and specialised professional nurses;
- increase training sites, especially in rural areas;
- involve private sector in training nurses;
- support sustained production of specialisation on all levels of care (primary, secondary and tertiary);
- encourage research;
- address mentoring programmes and accompaniment of nursing students;
- address funding opportunities for education;
- expand the healthcare team;
- include alternative healing practices;
- promote lifelong learning and research-based practice among all health workers;
- support internationalisation;
- collaborate with other countries in workforce planning; and
- implement strategies to retain skilled staff.

These strategies support the education of neonatal nurses as a post-basic field of specialisation identified as a 'scarce skill' speciality. The desire to promote lifelong learning, research-based practice and training of change agents to work for quality health care further supports the education of reflective practitioners. It also suggests that sustained production (education) of reflective neonatal nurses to meet the demands of the community and country must be actively planned for.

3.3.5 New Partnership for Africa's Development (NEPAD)

NEPAD is a strategic framework, which was adopted by African leaders at the 37th Summit of the Organization for African Unity. It is designed to address current challenges facing the African continent with the vision of Africa's renewal, These challenges include escalating poverty levels, underdevelopment and the continued marginalisation of Africa. The NEPAD Programme of Action is a holistic, comprehensive and integrated sustainable development initiative for the revival of Africa, guided by formulated objectives, principles and focuses. One of the key priority action areas of the Programme of Action is monitoring and intervening as appropriate to ensure that the Millennium Development Goal areas of health and education are met (NEPAD 2005:1-2) (refer to section 3.3.8).

The particular health issues facing Africa were addressed when Africa's Health Ministers considered the NEPAD Health Strategy at the meeting of the WHO Regional Committee for Africa in 2002. The Health Strategy

> is based on harnessing a health and multi-sectoral effort, strengthening health systems and services, scaling up programmes against disease and conditions related to pregnancy and childbirth, empowering individuals and communities to act to improve their health, mobilising and effectively using sufficient sustainable resources and sharing available health services equitably within countries. (Buch 2003:1)

The Health Strategy is necessary because the huge burden of preventable disease, disability and death that Africa carries not only causes unnecessary death and suffering, but also undermines economic development and damages the continent's social fabric. Particularly harmful are the deaths from conditions related to pregnancy and childbirth (NEPAD Health Strategy 2005:2). The burden of disease persists in Africa "in spite of the availability of suitable tools and technology for prevention and treatment and is largely rooted in poverty and in weak health systems. Yet, where the necessary conditions have been created, there have been important successes" (NEPAD Health Strategy 2005:2).

Directives of the Health Strategy that are relevant to neonatal nursing practice and education are "strengthening and scaling up programmes to reduce disease burden due to conditions related to pregnancy and childbirth", and "empowering individuals, families and communities to act to improve their health, achieve health literacy and integrate effective health interventions into existing community structures", amongst others (NEPAD Health Strategy 2005:4).

Reflective neonatal nurses can contribute significantly towards these goals through their specialised knowledge and skills, and also their open-mindedness, innovation and creativity as change agents in the health sector.

3.3.6 World Health Organization (WHO)

The core functions of the WHO include (World Health Organization 2007a):

- providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
- shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
- setting norms and standards and promoting and monitoring their implementation;
- articulating ethical and evidence-based policy options;
- providing technical support, catalysing change and building sustainable institutional capacity; and
- monitoring the health situation and assessing health trends.

One mechanism for implementing these functions is the Millennium Development Goals, set for the period 2006 to 2015, to address global health issues, one of which is maternal and newborn health.

South Africa's Millennium Development Goals are linked to those of the WHO. Relevant goals and targets for this study include the reduction by 2015 of child mortality for children under five by two-thirds, which includes the infant mortality rate (South Africa 2005b:1,5).

Reflective neonatal nurses will be able to contribute to reducing the infant mortality rate through competent quality care, and contribute to leadership, innovation and creativity in the field of neonatal nursing.

3.4   NURSING EDUCATION

Nursing has changed significantly with changes in the community, knowledge and technology, and nursing education has adapted accordingly. The impact and implications of historical elements and tradition on contemporary education practice must be recognised when addressing the existing framework of nursing education (Botes 1997:3-9).

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

This historical overview is included in this study because historical factors still have significant implications for current education practice. Neonatal nursing education has developed from a simple, practical tradition of caring for one's own and the neighbours' newborn and sick babies to a specialised professional career-based programme, which emphasises the education of reflective neonatal nurses.

3.4.1 International historical overview

The focus of nursing over the centuries changed from 'caring' to 'curing'. Initially there was no formal education of nurses, and the available knowledge was non-scientific. Knowledge and skills in caring for the sick and helpless, including newborn babies, were transferred from generation to generation by word-of-mouth and apprenticeship systems. The early Christian churches and philanthropists played a significant role in caring for the sick and helpless, contributing to the caring approach found in nursing (Mellish 1984: 4, 18-10, 24-25, 28-30, 40-44).

Nursing education first began formally in the late eighteenth century, based on a combination of theory and practical instruction. The theory slowly integrated scientific knowledge as it became available, but the contents of these education programmes were mainly unscientific knowledge passed on as tradition (Mellish & Brink 1990:18-19).

Nursing became a profession in the Nightingale era of the nineteenth century, and interest was sparked in the training of nurses. Nursing education was based on a holistic approach that included knowledge, skills and moral development of nurses. Nursing education still followed an apprenticeship approach with limited theory and the main focus on practice. The humanitarian aspect of nursing was encouraged (Mellish 1984:62-77; Mellish & Brink 1990:19-20; Potgieter 1992:3-14; Searle 1972:136).

Neonatal nursing education was not distinguished from other types of nursing education or given any special attention during this era. Rather, the holistic, apprenticeship approach, which combined theory and practice, became fundamental in nursing education. This approach was transferred to the Cape Colony and became part of nursing education in South Africa (Mellish & Brink 1990:19-20; Searle 1972:136). The concept of reflective education was unknown.

Nursing in the early twentieth century was influenced by wars, staff shortages, poor remuneration, long working hours and lack of uniformity in the organisation of health services and the training of nurses, but also by significant breakthroughs in scientific knowledge regarding hygiene, nutrition, infection control and the use of anaesthetics (Potgieter 1992:35-49; Searle 1972:136-137). Newborn and sick babies were not regarded as a high priority and no particular progress in neonatal nursing education took place during this era, but these breakthroughs were of major significance in later developments.

The mid and late twentieth century world-wide was characterised by the growth of nursing as a profession. Nursing education became part of tertiary education and the development of formal curricula for basic nursing courses and post-basic specialisations exploded. Increased accessibility of scientific knowledge, advances in medical technology and pharmacology, and various political, social, health and other factors promoted this trend (Kirby & Kennedy 1999:3-24; Mellish 1984:62-77; Mellish & Brink 1990:19-20; Potgieter 1992:3-14).

During the same period neonatal nursing also changed significantly. Important changes included ethical and legal trends, changes in the number and composition of patient populations, general socio-economic and political changes, the institution of managed care, the advancement of medical technology, enhanced communication technology and the development of new methods of treatment and patient management (Biel, Eastwood, Muenzen & Greenberg 1999:285-290). These changes resulted in the transition of post-basic neonatal nursing education from hospital-based certified courses to graduate degree programmes offered by universities and colleges of nursing (Strodtbeck, Trotter & Lott 1998:272-278). This was also the case in South Africa.

3.4.2 South African historical overview

The Dutch East India Company decided in 1651 to establish a refreshment station at the Cape. In 1652 the first European settlers under the command of Jan van Riebeeck arrived at the proposed settlement. The regulation of midwifery of 1642 of the Dutch East India Company was immediately applicable in the new colony as it was applied in Holland, but no other regulations regarding nursing or nursing education operated in the Cape. A few sworn midwives were appointed to attend to deliveries, while the sick and old were mainly nursed by the older women in the community, and by attendants and slaves in the hospitals. No formal

nursing or nursing education was recorded until 1806 (Mellish 1984:78-86; Searle & Pera 1993:8).

During the British occupation from 1806 until 1909 many improvements took place. The British justice system came with British occupation, including its health legislation. Most hospitals were military hospitals. Statutory registration for doctors, pharmacists and midwives (not nurses in general) was legislated in 1807. Ethical codes were promulgated, but were not applicable to nurses in general. The 1810 code specifically for midwives focused on management of mothers in labour. The only reference to the newborn at that time was a stipulation that all stillborn and newborn deaths and their probable causes had to be reported (Mellish 1984:80-87; Searle & Pera 1993:11).

A new era was introduced by Sister Henrietta Stockdale, who was a pioneer in South African nursing and nursing education. She founded the first nursing school in Kimberley in 1877. She was trained in Great Britain and founded her nursing education and understanding of the nursing profession on the Nightingale system. The further development of nursing as a profession and nursing education was influenced by medical practitioners trained in European universities and nurses from Great Britain, New Zealand, Canada and Australia (Mellish 1984:86-92; Potgieter 1992:129-141; Searle & Pera 1993:13). Central concepts in nursing education in this era included an emphasis on caring, a holistic approach, an apprenticeship style of training and the combination of theory and practice. Most programmes however still lacked formal curricula. Nursing of newborn and sick babies or education of neonatal nurses received no special attention.

South African nursing and nursing education faced numerous problems in the first part of the twentieth century: poverty; epidemics; political division; lack of uniformity and agreement between those responsible for health care services, nursing and nursing education; staff-shortages; lack of tutors; difficult working conditions and long hours; and various attempts to improve the standards, recognition and education of nurses (Mellish 1984:93-95; Potgieter 1992:135-146; Searle & Pera 1993:11-14).

The main focus of nursing at this time was 'caring' or 'nurturing' rather than 'curing', and practice was based on tradition not on scientific knowledge. This also applied to the nursing of newborns. The indigenous people of South Africa had their own history of caring for newborns; some traditional practices were primitive and dangerous, and others effective, built on an empirical base of generations' worth of gathered knowledge. Maternal and child mortality was

very high in both the so-called 'civilised Western population' and the indigenous tribes (Mellish 1984:97-98).

State registration for all nurses and midwives with the South African Medical Council was legislated under the Medical and Pharmacy Act, no. 34 of 1891, and regulations were drawn up for the examination, certification and registration of nurses and midwives. The South African Trained Nurses' Association was established in 1914, which led to significant changes in nursing as a profession, such as compulsory registration, improvement in nursing education and practice, membership of the International Council of Nurses and development of post-basic courses (Mellish 1984:93-103; Potgieter 1992:139-145; Searle & Pera 1993:18).

The education of nurses and midwives were seen as separate issues, with different sets of regulations. The Colonial Medical Council published detailed regulations for the training of midwives in 1916 that enforced improved education of midwives, which was soon followed by the other Medical Councils (Natal, Transvaal and Free-State). Most deliveries took place at home and the hospitals and maternity wards did not have separate facilities for high-risk newborns. The content of midwives' training focused on deliveries and puerperium care of the mothers (Searle 1972:327). Limited attention was paid to nursing of the newborn.

The first post-basic courses in nursing were presented in South Africa in 1917. The first of these courses relevant to newborn care was the 'Mothercraft' course presented in 1924, which was developed as an attempt by the Child Welfare Movement to reduce the high infant mortality rate in the Cape. The aim of the course was to train nurses in 'mothercraft' so that they could educate mothers in the nutrition and care of their children to protect their lives, while in the maternity hospitals and children's wards and during health visits at their homes or communities (Potgieter 1992:144-145; Searle 1972:345).

The standard of nursing education improved under the control of the South African Medical Council from 1928 to 1944, but the relationship between theory and practice was very poor and totally inadequate to provide for the needs of the community and modern health care at that time. The emphasis of the curricula was on curative healthcare based on natural sciences, and totally excluded the social sciences (Potgieter 1992:146-148; Searle 1972:290-300). Still no particular attention was given to the nursing of the sick newborn or education of neonatal nurses.

Nursing education was not part of general education under control of the Department of Education, but was controlled by authorities who gave preference to service needs (Department of Health, provincial administrations and private institutions). Nurses were exploited in practice as functional workers and lectures were only given near examination time. Nurses were taught *how* to do something, but seldom *why.* This approach was against the Nightingale and Stockdale principles (Mellish & Brink 1990:28; Potgieter 1992:166-167).

The nursing profession obtained professional autonomy in South Africa with the promulgation of the Act on Nursing, no. 45 of 1944, and the establishment of the SANC and the South African Nursing Association (SANA). This led to compulsory registration of nurses, development of standards for nursing practice and education, ethical codes for the profession and scopes of practice for the different categories of nurses and midwives. Nursing education was reorganised in various ways, through the establishment of nursing colleges, approval and inspection of training hospitals, guidelines for and approval of curricula, movement to comprehensive education in the four disciplines (midwifery, general, psychiatric and district nursing), prescription of an ideal ratio of theory to practice (1:4), reduced working hours and improved conditions of practice and education, introduction of post-basic courses and later on degrees and post-graduate degrees in nursing science (Mellish 1984:93,100-103; Potgieter 1992:146-159,158-163; Searle & Pera 1993:14). These changes were the foundation of the development of education programmes for specialised areas such as neonatal nursing, but not yet for education of reflective practitioners.

A one-year post-basic course in paediatric nursing was available from 1952 in the Transvaal. The course focused on nursing sick children, one aspect of which was nursing sick newborns. The course was only available for white nurses (Searle 1972:346). Post-basic courses in intensive care nursing were available from 1970. The content prescribed by the SANC did not include any specific references to the intensive care nursing of sick newborns (Regulation no. 85 of 1970, as amended by Regulation no. 9 of 1993, and the associated 'Directive for the diploma in intensive nursing science') (SANC 1993c). The institution responsible for presenting the course could include content about sick newborns as an additional part of the course.

Nursing education was integrated into the mainstream of higher education in the late 1970s when autonomous nursing colleges were established in association with universities. The SANC maintained external control of nursing education by setting minimum requirements for training, conducting inspections of training centres, and demanding the registration of trained

nurses. Only basic and post-basic professional nurse training was offered at the nursing colleges in collaboration with the universities, while the training of staff nurses and nursing assistants was offered in a separate system that was not part of mainstream education. The universities continued to offer basic and post-basic nursing degree courses, as well as post-basic diploma courses (Potgieter 1992:166-172).

Knowledge about sick neonates increased, medical practice improved, technology advanced and the needs of the community changed. The mortality of neonates decreased, but morbidity increased. More infants survived, but they were often very ill, especially if very preterm (Boeghey 2004:3-4; Foster & Greenwood 1998:170; Kirby & Kennedy 1999:3-24; Verklan & Walden 2004:xiii). These infants could not be nursed in ordinary nurseries any more, so 'high care' or 'special care' areas were established to take care of them.

Neonatal nursing education was not available as a separate post-basic course for nurses who wanted to specialise in neonatal nursing science, but was presented in fragments through the post-basic courses, namely midwifery and neonatal nursing science; child nursing science; and medical and surgical nursing science (critical care).

The relevant sections of the post-basic course in midwifery and neonatal nursing science focused mainly on the immediate management of high-risk newborns. Examples of such outcomes are "Identify and evaluate the factors which promote or threaten the health and life of the mother and child, during labour and the puerperium" and "Evaluate the appropriateness of interventions and of diagnostic and treatment methods" (SANC 1993d:18). In the relevant sections of the post-basic course in child nursing science were the objectives "Identify and evaluate the factors which promote or threaten the health and normal development of the child" and "Evaluate the appropriateness of interventions and of diagnostic and treatment methods" (SANC 1993d:5), as well as common neonatal conditions and their management. Objectives of the medical and surgical nursing science course were "Identify and evaluate the factors which promote or threaten the health of man" and "Evaluate the appropriateness of interventions and of diagnostic and treatment methods" (SANC 1993d:14), while the "area of study may be determined by the nursing school depending upon local needs and the facilities available in the curative service/s involved (SANC 1993d:14). As a result, the courses in medical and surgical nursing science commonly included a module or study themes on post-operative management of the newborn. All in all, neonatal care is in all of these courses only a fragment.

The need for neonatal nursing to be recognised as a specialised discipline of nursing science was becoming urgent as neonatal nurses struggled to cope with all the changes happening in their practice. This prompted the development of short courses listed at the SANC. These courses used a traditional teaching approach and hardly encouraged reflective learning at all. (Refer to Table 3.1 for a comparison between the OBE approach and the traditional approach.)

At the dawn of the twenty-first century significant changes took place in South Africa's higher education and health care systems, and these also influenced nursing education. These changes involved new legislation such as the South African Qualifications Authority Act, no. 58 of 1995 (South Africa 1995); the Higher Education Act, no. 101 of 1997 (South Africa 1997); the Skills Development Act of 1998 (South Africa 1998) and Skills Development Levies Act of 1999 (South Africa 1999); the National Health Act, no. 61 of 2003 (South Africa 2004); the Nursing Act, no. 50 of 1978 (South Africa 1978) that is to be replaced by the Nursing Act, no. 33 of 2005 (South Africa 2005a); as well as regulations related to these acts. This legislation is discussed earlier in this chapter.

Neonatal nursing continued to develop and became more technical. Post-basic courses have been developed to train specialised neonatal nurses and are recognised by the SANC as an additional qualification in 'Medical and surgical nursing science: neonatal nursing' (SANC 2000: Unpublished). The first students qualified in 2001 at the University of Pretoria, after completing a two-year diploma course.

This course was written in SAQA format as discussed earlier in this chapter. The contents were a combination of the neonatal parts of the advanced midwifery and neonatal nursing-, child nursing- and critical care nursing (medical and surgical nursing) courses. The course was written in outcomes-based format, but presented using the traditional teaching approach with limited emphasis on reflective learning or reflective practice. The researcher's experience as an educator on the course was that the contents were fragmented and did not meet the demands of neonatal nursing practice, which could be addressed by this study.

The current state of neonatal nursing education is significantly shaped by the history of nursing education in South Africa, of which a brief overview is given to serve as a background.

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3.4.3 SANC

Because of the various changes in South Africa and its legislation, as mentioned above, the SANC revised its nursing legislation. The new Nursing Act, no. 33 of 2005, was promulgated in May 2006 (South Africa 2005a). The Act revises the existing code of conduct, ethical code and values, standards for practice, competency framework and scope of practice, and stipulates that these changes are to be implemented in phases. Part of this implementation is the revision of the education and training of nurses, including neonatal nursing education. Currently the Nursing Act, no. 50 of 1978 (South Africa 1978) is still in force, until the new nursing act will come into operation on a date determined by the President by proclamation in the Gazette (SANC 2006:Circular 03/2006).

In addition to be the SETA/ETQA for nursing, the SANC also influences education of neonatal nursing by providing criteria for accreditation of nursing schools, as well as health care facilities involved in education of nurses resulting in qualifications, and approve the institutions (SANC 1985; SANC 1993a; SAQA 2007a:1-2; SAQA 2007b:11-14).

3.4.4 Continuing professional development (CPD)

Once the Nursing Act, Act no. 33 of 2005, is proclaimed by the President to come into operation, the section related to continuing professional development (section 39) will be ....

> The Council may determine –
> (a) conditions relating to continuing professional development to be undergone by practitioners in order to retain such registration;
> (b) the nature and extent of continuing professional development to be undergone by practitioners; and
> (c) the criteria for recognition by the Council of continuing professional development activities and accredited institutions offering such activities. (South Africa 2005a).

This section of the Nursing Act is not yet implemented, but the health care institutions are preparing for implementation thereof by supporting their staff and providing learnership and bursaries to them to do courses such as neonatal nursing. It is expected that CPD requirements will increase the demand for education of neonatal nurses, but also to put an emphasis on proof of lifelong learning and therefore on reflective education. It is also expected that the HWSETA might be involved in implementation of CPD-processes (refer to discussion in section 3.3.7).

3.4.5 International Council of Nurses: Nurse Practitioner / Advanced Practice Network (ICN NP/ANP Network)

The International Council of Nurses: Nurse Practitioner / Advanced Practice Network (ICN NP/ANP Network) was launched in 2000 to address the needs of nurses in global trends. These global trends include the changing nature of health systems worldwide, namely technological advances, increased healthcare costs, need for varied services and desire for new models of care delivery (Affara 2006).

The ICN NP/ANP Network aims to be an international resource for nurses in ordinary and/or advanced practice and for other interested parties (e.g. policymakers, educators, regulators and health planners). The Network (ICN NP/ANP Network pamphlet):

- Distributes relevant, up-to-date information about practice, education, role development, research, policy and regulatory developments and appropriate events;
- Provides a forum for exchanging knowledge, expertise and experience;
- Supports individuals and countries in the process of introducing or developing nursing or advanced nursing roles and practice; and
- Making relevant international resources accessible.

The Network has defined the term and role 'nurse practitioner or advanced practice nurse' (APN), formulated an international scope of practice and set educational standards and regulation standards for nurse practitioners or advanced practice nurses that can be used as universal guidelines by participating countries, including South Africa (Goodyear 2006).

Neonatal nurses who have completed specialised training in neonatal nursing science are not formally recognised in South Africa as APNs, but only as registered nurses. However, they can comply with the definition of an APN formulated by the ICN NP/APN Network:

> A nurse practitioner or advanced practice nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competences for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master's degree is recommended for entry level. (ICN 2002)

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The profile of a reflective neonatal nurse fits the scope of practice of an APN as formulated by the ICN NP/APN Network:

> The scope of practice of the APN entails the cognitive, integrative and technical abilities of the qualified nurse to put into practice ethical and culturally safe acts, procedures, protocols and practice guidelines. The clinical practice of the APN is scientifically based and applicable to healthcare practice in primary, secondary and tertiary settings in all urban and rural communities. The nurse in advanced clinical practice demonstrates a high level of autonomy in direct patient care and management of health problems. The APN is accountable for providing health promotion, patient and peer education, mentorship, leadership, and management of the practice environment. Maintaining currency and improving nursing practice is the responsibility of the APN that is achieved through the translation, utilization and implementation of meaningful research. The APN engages in partnerships with patients and health team members for determining resources needed for continuous care as well as partnering with stakeholders influencing the policy that directs the health care environment. (Goodyear 2006)

### 3.4.6 Council of International Neonatal Nurses (CINN)

The CINN was founded in collaboration with the WHO, the Global Network of the WHO Collaborating Centres for Nursing and Midwifery Development, and the International Council for Nurses (ICN). The CINN's goals are consistent with the mission and strategic plan of the WHO to promote health for all people, with special emphasis on vulnerable populations, including mothers and infants. The CINN's contribution to neonatal nursing is to assist worldwide with initiating health policies in neonatal care, developing nursing and professional standards of neonatal care, developing neonatal nursing education materials and sharing information about important issues in nursing care (Global Network… 2002:14-15).

Educating reflective neonatal nurses for the South African context will involve considering the goals, objectives and content suggested by the CINN if the education programme is to remain globally and internationally relevant.

3.5 FRAMEWORK FOR EDUCATING REFLECTIVE NEONATAL NURSES

Based on the discussions in this chapter, a framework for educating reflective neonatal nurses can be formulated, as schematically presented in Figure 3.1. The framework has two main sides, namely South African higher education and neonatal nursing education in South Africa.
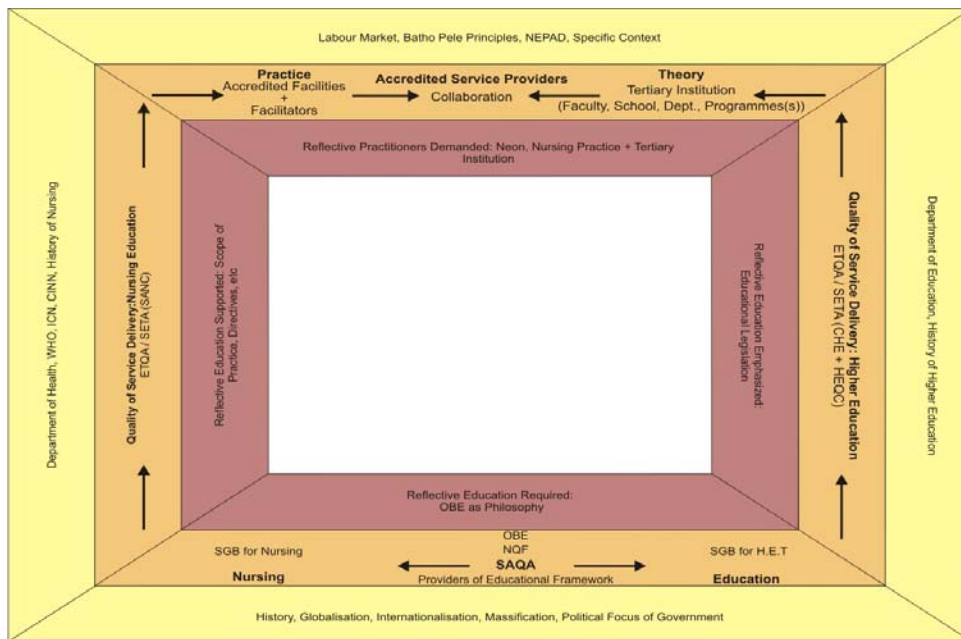
Figure 3.1: Framework for education of reflective neonatal nurses in a South African context

Each side of the framework is driven by the providers of the educational framework, which give rise to the bodies responsible for quality assurance in service delivery. These bodies in turn accredit providers responsible for delivering the service, which in this case is neonatal nursing education. Different forces influence different aspects of the framework directly or indirectly, and so eventually the education of reflective neonatal nurses in a South African context.

The driving force of the providers of the educational framework is rooted in the legislation that establishes SAQA and the NQF, specifies the aims for education in South Africa, and makes OBE its underlying philosophy. These providers of the educational framework are the NSBs, Expert Consultative Panels or Qualifications and Quality Assurance Councils and SGBs for higher education and nursing respectively. These providers are influenced by factors arising from the history of nursing, history of education, globalisation, internationalisation, massification and the focus of the government.

The bodies responsible for quality of service delivery are the ETQA/SETAs. The ETQA/SETA for higher education is the Council on Higher Education and the Higher Education Quality Committee, which are influenced by forces such as the history of higher education, the Department of Education and international trends. The ETQA/SETA for nursing education is the SANC, which is influenced by forces such as the history of nursing, the Department of Health, the WHO and international trends and organisations (for example the ICN and the CINN).

The bodies responsible for service delivery are the accredited providers. These for higher education are the tertiary institutions, and for nursing education those tertiary institutions responsible for nursing education and the accredited health facilities (in this case the accredited hospitals). The accredited providers are influenced by forces such as the labour market, *Batho Pele* principles, NEPAD and the particular context.

The education of reflective neonatal nurses in a South African context takes place within this framework and is implied by the providers of the educational framework as part of OBE and included in criteria for qualifications. The education of reflective neonatal nurses is also emphasised by bodies responsible for quality of service delivery as important criteria of quality education, and the accredited service providers of higher education and nursing education demand it as expected outcomes.

3.6   SUMMARY

This chapter describes the current situation in higher education in South Africa, as applicable to neonatal nursing education, and then provides an overview of the historical development of neonatal nursing education, internationally and nationally, to highlight the most important influences on this education. Additional influences in higher education, health and nursing are explored and described as they affect neonatal nursing education.

This chapter contributed to the development of the model for education of reflective neonatal nurses in a South African context by identification and clarification of the concepts related to the framework (higher education and nursing education) and the purpose (outcomes expected according to higher education and nursing education). The next chapter contains a description of neonatal nursing students and reflective learning.