Development of a Concept-based Postgraduate Course: Scholarship in Advanced Practice Nursing at a University in South Africa

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Original published work submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor of Philosophy.

Johannesburg, 2020

Declaration

I, Lizelle Crous, student number 684391, declare that this Thesis is my own work. It is being submitted for the degree of Doctor of Philosophy at the University of the Witwatersrand, Johannesburg with Human Research Ethics Clearance number M160470 (Annexure A). It has not been submitted before for any degree or examination at this or any other university.

…… 15th day of June, 2020

Lizelle Crous

To my:

Husband, Albert Crous

and

Daughter, Elize Crous

Abstract

There is an urgent need to introduce Advanced Practice Nursing (APN) in South Africa to deliver specialist healthcare services in this rapidly evolving healthcare landscape. Recent amendments to the nursing regulations require these nursing specialists to be prepared at a postgraduate diploma level. While specialisation categories for nursing practice do exist, there is no nursing specialist register, and thus for many of the nurses trained to work in these areas, there has not been a clear career pathway available. It is imperative that postgraduate diploma curricula for APN programmes are developed that produce nurses who engage scholarship within their practice.

The purpose of the study was to develop an evidence-based postgraduate scholarship course which would contribute 30 credits towards a postgraduate diploma in an APN programme. There is a lack of clarity globally on the roles and attributes of an APN. It was necessary in this study to gain a clear picture of the APN's role within the South African context, in order to develop a relevant scholarship programme which will produce an APN with appropriate competencies. A Design and Development Research (DDR) was implemented to guide the development of the programme.

The five phases of DDR were: Phase 1) a scoping review which explored the characteristics of the APN from an international perspective; Phase 2) a Rank Order Scale (ROS) identified the desired characteristics of APN within the South African context and, where consensus was not achieved, a nominal group discussion sought clarification; Phase 3) the prototype of the scholarship for APN course was developed, applying educational theories related to conceptual learning and concept-based curriculum; Phase 4) Formative evaluation of the quality of the course in scholarship for APN was achieved through a workshop method with internal stakeholders; and Phase 5) the course scholarship in APN was validated by external educational experts using a review process. The product of the DDR is a 30 credit course in scholarship which will form part of a postgraduate diploma in APN that is contextually relevant to the South African healthcare landscape, produces the desired qualities of an APN as clarified through the initial phases of the study and which is both internally and externally validated.

The study is limited by the delayed promulgation of the governing regulations that will determine the implementation and approval of the programme. At the time the study was conducted, the regulations were still open for comment which limited the opportunity to engage the broader stakeholder community and to summatively evaluate the programme through student participation. Recommendations for further research are to involve more

stakeholders in the evaluation of the course once implemented to determine if the programme objectives are met.

Acknowledgements

My gratitude goes to the following people who has supported me in my PhD journey.

Dr Sue Armstrong, you are truly inspirational, and I am fortunate to have embarked on this journey under your guidance. Under your guidance I felt comfortable to explore and familiarise myself with the complexities of Nursing Education, trying out new things. I can only hope to do the same for someone else one day.

All the staff at the Department of Nursing Education, I want to thank you for the support I received during the last few months, which allowed me to reach my goals. You were all willing to participate in various phases of the study and your contributions are valued. Prof Shelley Schmollgruber, thank you for the endless conversations which stimulated my thinking, you and Agnes Huiskamp encouraged me to think outside the box. Claire Bracher, for giving up your time to brainstorm ideas when I was stuck it helped me moving forward.

Paula Barnard-Ashton, your friendship, constant motivation, and support made this a reality but more so made the journey bearable. You were always ready with a word of encouragement or a “let’s do this” to get me going again. More importantly, thank you for the reading and help with formatting the document, your inputs were valuable and appreciated.

I have to extend a special thanks to my family and friends who stood by me every step of the way. Albert Crous, thank you for supporting me and creating the time and space for me to complete this task. Elize Crous, without you I would not have had the energy to keep going, you always had a snack ready for the late-night writing. Armin and Marianne Kluth, your positive and encouraging words gave me the courage to carry on. Finally, my parents, Derick and Beulah de Wet, thank you for always believing in me without your constant prayers this would still be a dream.

A heartfelt thank you to all.

Congress and Academic Presentations

Crous, L and Armstrong, S.J. (2017). The role of the Advanced Practice Nurse: Questions and Answers -*Sigma Theta Tau International: Chi Xi at-Large Chapter: First Biennial Conference*, Lobamba, Swaziland.

Crous, L and Armstrong, S.J. (2018). Is there a future for Advance Practice Nurses in South Africa? A situational analysis. *RCN International Nursing Research conference,* Birmingham, UK.

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Nomenclature

APN	Advanced Practice Nurse / Nursing
BD	Backward Design
DDR	Design and Development Research
ICN	International Council of Nursing
NQF	National Qualifications Framework
PDSA	Plan; Do; Study; Act
RedCap®	Research Electronic Data Capture
ROS	Rank Order Scale
RS	Research Supervisor
SANC	South African Nursing Council
SAQA	South African Qualifications Authority

Chapter 1. Overview of Study

1.1. Introduction

This chapter provides an overview of the research study and states the problem, research question, purpose, and objectives of the study. It further introduces the reader to the process of curriculum development for Advanced Practice Nursing (APN) within the South African context.

The nursing schools in South Africa are currently developing new educational programmes at both an undergraduate and postgraduate level to meet the requirements of the revised Nursing Qualifications Framework. All nursing qualifications have been adjusted to fit the Higher Education Qualifications Framework (Blaauw *et al*., 2014). However, as Blaauw *et al.* (2014) explain, this is not the only reason for the change, "changes in patient disease profile, advances in medical and information technology, the shift to evidence-based practice, the need for life-long professional development, the challenges of working in health care teams, and the demands of on-going health system reforms" have all contributed to the need to change the nursing qualifications. With this change, an opportunity presented itself to evaluate the current nursing programmes and reflect on what is working and what elements should be substituted or replaced.

1.2. Background

Since the turn of the century an interest was seen globally in the development of Advanced Practice Nurses (APN). However, the pace of the development of APN programmes varies and affects the implementation thereof (Sheer & Kam Yuet Wong, 2008). According to Sheer and Kam Yuet Wong (2008) the reasons for developing these programmes differ from country to country with the similarities including the provision of resources, harnessing speciality expertise and promoting scholarship within the profession.

In South Africa, the nursing qualification framework has been restructured to realign with the higher education qualifications framework. This has resulted in the incorporation of the nursing colleges into higher education and changes to most of the legacy nursing programmes. This has created the opportunity for revision of the specialist registration categories for nurses which now includes the Nurse Specialist (SANC, 2012). New programmes are required to produce nurses who can qualify to register as Nurse Specialists with the South African Nursing Council (SANC). The regulations governing the programme

parameters are yet to be promulgated but it has been established that this will be at the postgraduate diploma level (NQF level 8). In preparation to service this new market our institution has embarked on the development of a postgraduate diploma in APN to prepare nurses for advanced practice (Department of Health, 2013 and SANC, 2016).

While the concept of APN is not new in countries such as Australia, Canada, England and Ireland, whom have been developing models for the implementation of APN since the early 1990's (Jokiniemi, 2012), it is novel within the South African context. Research originating from countries that have APN programmes, highlights the importance of understanding what an APN is and the role they play, or will play, within the local healthcare system (Woods, 1996; Baldwin *et al*., 2012; Begley *et al.*, 2012; and Kilpatrick *et al*., 2014). As such, it is important to establish the scope of the APN within the South African healthcare system prior to developing educational programmes that produce the APN. A critical component of separating the general nurse practitioner from advanced practice is their engagement in scholarship. While scholarship is well defined and easily incorporated in postgraduate programmes, the ability to embed it as a characteristic or role of a nurse practitioner is more challenging. A course in scholarship in APN was thus identified as a key component of the postgraduate diploma qualification.

1.3. Advanced Practice Nursing (APN)

The development of APN began at the turn of the 20th century with the term *specialist in nursing* and described both a professional nurse who completed a postgraduate course in a clinical speciality and a professional nurse with extensive expertise and experience in a clinical speciality area without having a postgraduate qualification. In the 1960's the medical profession referred to these professional nurses working in speciality areas as having an *expanded* or *extended role* incorporating expertise from other medical disciplines, and not solely from the nursing profession. The clinical nurse specialist role was officially recognised in the international arena in the mid 1970's and the role was defined as "an expert practitioner and change agent" (Hamric *et al.*, 2014). During the 1980's the term 'advanced practice' was being used to describe a hierarchical movement towards incorporating formal graduate education programmes within nursing to prepare the APN rather than a mere expansion of skills offered by other disciplines (Hamric *et al.*, 2014).

Hamric *et al.* (2014) further explained that the development of the APN role in the USA was driven to provide care to people in under resourced areas where a shortage of healthcare providers were found. The shortage of healthcare professionals necessitated the

introduction of a new category of healthcare practitioner with the ability to apply critical thinking skills and make sound clinical judgements that inform clinical decisions and thus improve the health outcomes of patients. The APN meets the requirements of this category of healthcare practitioner. Healthcare in South Africa and the nursing profession don't just need more nurses to meet the healthcare needs of the country, but would rather benefit from introducing a category of nurse, the APN, with a higher level of education, who is actively involved in scholarly activities to influence clinical practice (SANC, 2012 and Roets *et al.*, 2016).

Nursing is a practice discipline guided by regulations and standards for the profession (SANC, 2012 and Hamric *et al.*, 2014). The roles nurses fulfil within practice are reflected in their daily activities which might not always be directly linked to the nursing profession. For example, a nurse educator performs activities related to education and not directly related to nursing practice as such. The variability of nursing roles and functions has led to inconsistent use of terminology describing nursing practice globally, and is even more compounded in APN as illustrated by Bryant-Lukosius and DiCenso (2004) with the inconsistent and interchangeable use of 'advanced practice nursing' and 'advanced nursing practice', which might sound similar but have distinct differences in meaning and application.

To understand the complexity of APN the following elements should be unpacked:

a) 'Advanced nursing practice' refers specifically to what the APN does within their role. Mick and Ackerman (2000), have reported on The Strong Model (developed by a group of APNs at the Strong Memorial Hospital in 1994) which described the domains of practice of APNs. These domains included: direct comprehensive care, support of systems, research, education, publication and professional leadership. Each domain requires specific role competencies to provide direct and indirect patient care which allows for advanced nursing practice.
b) 'Domain' is a sphere of knowledge, or area wherein the APN exists, acts, has influence or significance (Hamric *et al.*, 2014)
c) 'Advanced practice nursing' (APN) encompass the entire field of study, in this case a specific speciality of nursing practice. It involves all the roles across the domains of practice that the APN fulfils to advance the nursing profession, as well as the level of functioning within the healthcare context in which APN exists.
d) 'Advancement' of nursing practice is much more than merely expanding practice. Although the APN functions on a different level than a professional nurse, allocating more tasks or roles does not mean advancement it is merely expanding the duties of the nurse. Having the expert knowledge, skills and competencies to practice within a

specific speciality and draw on all practice domains simultaneously is what allows the APN to advance nursing practice and with it the nursing profession (Bryant-Lukosius & DiCenso, 2004).

e) The 'Advanced Practice Nurse' (APN), within in the practice domains, functions within various roles. Role confusion is reported countlessly in the international literature due to applying the same title to different categories of nurses who function in various roles, even though the purpose, educational preparation and scope of practice is different (Bryant-Lukosius & DiCenso, 2004). A role can be defined as "prescribed or expected behaviour of a person that is either associated with, or determined by, a position or purpose within a situation, organisation or society" (online: dictionary.cambridge.org). According to this definition the APN has to display certain behaviours to meet the expectations of all stakeholders in the healthcare system.

In the absence of a clear definition of APN globally, it is imperative for the development of this category of nurse to gain consensus from stakeholders in a specific context as to what APN is and how they act within the healthcare system. There is, however, global agreement on the following aspects of APN which can guide the development of the APN category:

- Advanced Practice Nursing (APN) extends the scope of practice of professional nurses through specialization and advancement. Demonstrating a greater depth and breadth of knowledge as well as performing complex skills and interventions (Mick and Ackerman, 2000 and Sastre-Fullana *et al*., 2014).
- Involves autonomous practice with an inherent function of collaboration, consultation, cooperation and shared decision-making (Rosche *et al*., 2013 and Wickham 2013).
- Maximise nursing knowledge through research and evidence-based practice (Sastre-Fullana *et al*., 2014 and Bryant-Lukosius *et al*., 2016).
- Being a change agent and promote the development of the profession (Bryant-Lukosius *et al.,* 2004 and Elliot *et al*., 2012)

The conceptualization of APN in the international arena was guided by conceptual models that informed the development of a framework which started in the early 1980's. Conceptual models have many practical benefits from facilitating communication, ensuring consistency in practice and the articulation of role identity and function. Fawcett (2005) described a conceptual model as, "a distinctive frame of reference […] that tells how to observe and interpret the phenomenon of interest to the discipline; provide alternative ways to view the

subject matter of the discipline.*"* The questions that guided the development of a conceptual model for APN included:

- What differentiates APN from other professional nurse categories?
- What nursing activities can be classified as advanced?
- What are the characteristics of APN?
- What knowledge and skill is required by the APN?
- Does the model address persons, health and illness, nursing and the environment?

Various conceptual models were developed such as the Hamric Integrative Model of Advanced Practice Nursing (figure 1.1), proposing a conceptual definition, central characteristics, and core competencies as well as primary criteria for APN (Hamric *et al.*, 2014). Figure 1.2 shows Brown's framework which included environments impacting on practice and he proposed a definition for APN: *"*professional health care activities that (1) focus on clinical services rendered at the nurse-client interface, (2) use a nursing orientation, (3) have a defined but dynamic and evolving scope, and (4) are based on competencies that are acquired through graduate nursing education*"* (Brown, 1998).

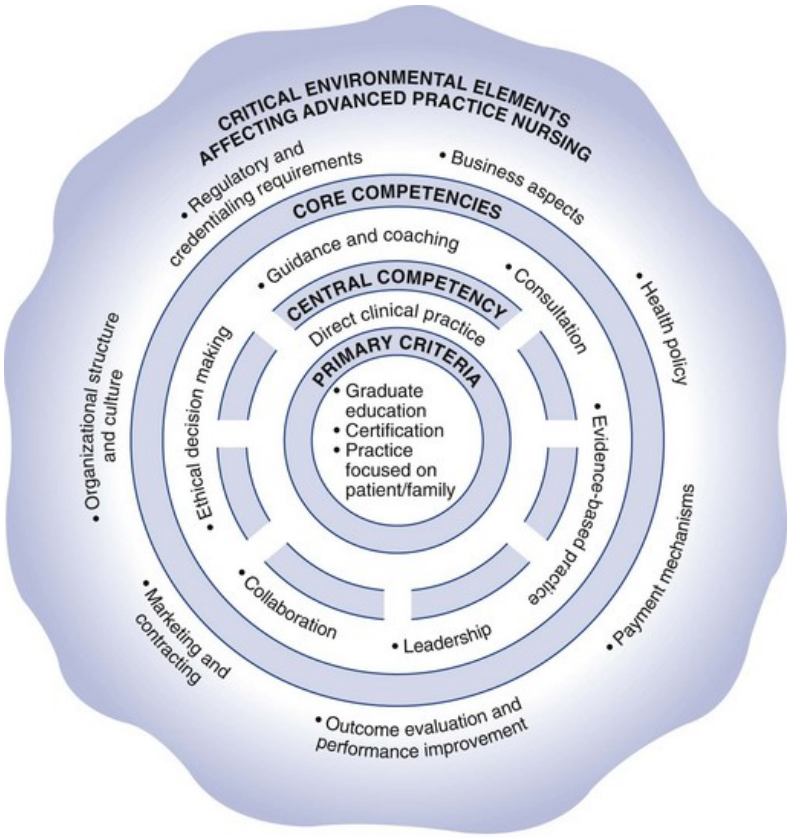

Figure 1.1 Hamric's model of advanced practice nursing

(From Hamric *et al*. [2014]. Advanced practice nursing. An integrative approach. Ed. 5. Elsevier. P.44)

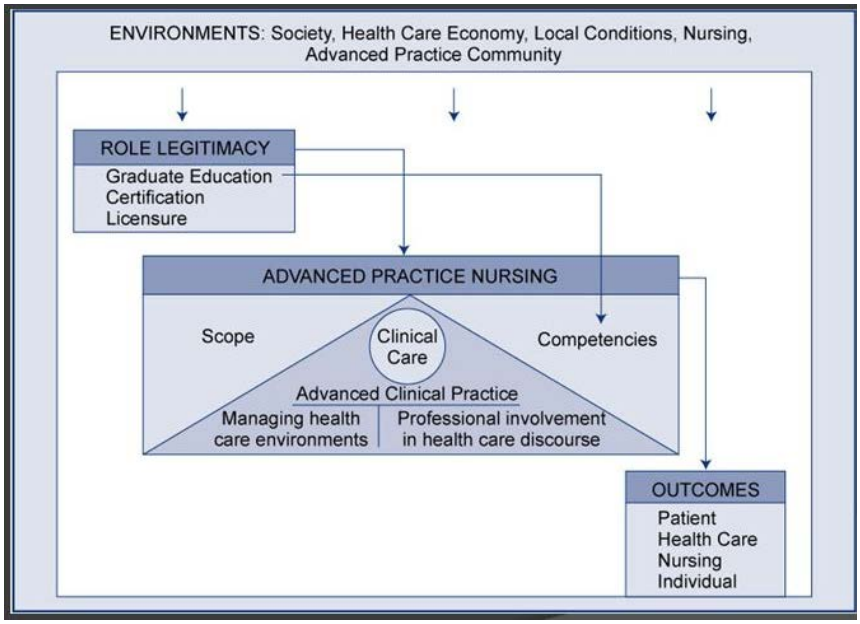

Figure 1.2 Brown's framework for advanced practice nursing.

(From Brown, S.J. [1998]. a framework for advanced practice nursing. Journal of professional Nursing, 14, 157 - 164.)

A third model was developed by APN's from the Strong Memorial Hospital and grew from the delineation of the domains and competencies of various APN categories. Hamric *et al.* (2014) described The Strong Model (figure 1.3) as an economical model with resemblances to other APN conceptual models. The main difference is that The Strong Model places emphasis on all the domains of practice and does not place the domain of direct care in the centre of APN like other conceptual models, but rather considers the domains to be mutually exclusive of one another. The Strong Model was found to be useful by authors such as Mick and Ackerman (2000); Becker *et al*. (2006) and Chang *et al*. (2010) in planning APN curricula and guiding clinical practice. The Strong Model further encapsulates the professional practice of APN with the unifying threads of scholarship, collaboration, and empowerment.

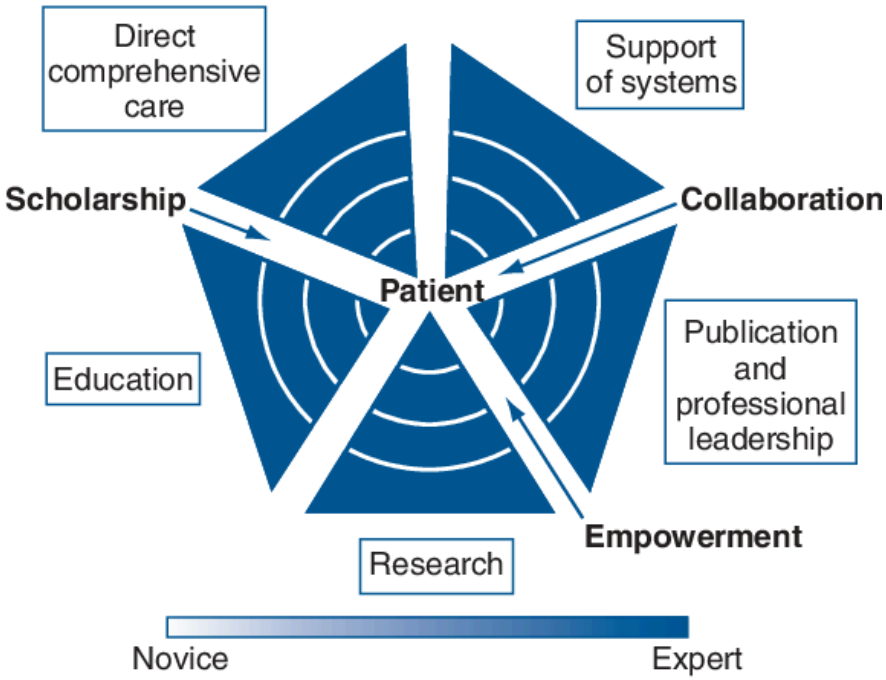

Figure 1.3 The Strong Memorial Hospital's model of advanced practice nursing.
(From Ackerman et al.. [1996]. Development of a model of advanced practice. American Journal of Critical Care, 5, 68-73.)

1.4. The South African Context

South Africa faces a crisis in nursing born through two decades of poor health systems governance, mismanagement of funds and resources, the introduction of free maternal health without increase in the nursing human resource capacity and the country's quadruple burden of disease (Armstrong *et al*., 2019). The majority of nurses practicing in South Africa are trained at a college diploma level (NQF level 6) and are thus limited in their practice role and their ability to service the complexity of health issues compounding our healthcare environment. There is an acute shortage of professional nurses with specialist qualifications currently practicing in South Africa (Armstrong *et al*., 2019), most of which are trained at the level of a diploma in advanced nursing (NQF level 7).

Professional practice programmes that were, until recently, offered at South African universities were known as 'Professional Nursing Dynamics' and became reliant on one major source, i.e. Muller's Nursing Dynamics (2009) which is more orientated to general nursing and lacks elements of advanced nursing practice, leadership and scholarship. However, the teaching approaches between the institutions offering this course utilised different teaching approaches spanning traditional didactic teaching approaches to more modern andragogic teaching approaches. The product of these courses was the professional nurse with an additional qualification in a specific speciality. This professional

nurse accepted an expanded role with additional responsibilities within their healthcare context, but the Professional Nursing Dynamics course did not prepare them for advanced practice to the standard as described for the APN where scholarship is embedded in their nursing practice.

There is thus an urgent need to develop nurses with critical thinking, problem-solving and a willingness to challenge traditional nursing interventions and test ideas using reflective practices in order to advance the nursing profession to cope in this changing and demanding landscape. Scholarship in practice is unique to the APN and can only be embodied in a nurse who is trained at a more advanced level, thus supporting the need for the development of a postgraduate diploma in APN (NQF level 8).

The International Nursing Council defined the categories of APN as the Clinical Nurse Specialist and the Advanced Practice Nurse, prepared at the master's level (NQF level 9 equivalent) with a scope of practice identified for each. The SANC, however, proposed the framework for the introduction of the APN at two levels: The Nurse Specialist with a postgraduate diploma in APN (NQF level 8) and the Advanced Nurse Specialist with a master's degree (NQF level 9). There is limited alignment with the global nursing structures, which has created confusion and has caused ongoing delays in the promulgation of the regulations governing the development of nursing programmes to develop Nurse Specialists for registration with the SANC.

The SANC proposed competency framework for APN (SANC, 2014) to guide the development of the postgraduate diploma in APN which includes five domains, namely:

1. professional, ethical, and legal practice
2. care provision and management
3. personal development and quality of care
4. management and leadership
5. and research.

It is suggested that a postgraduate diploma in APN should cover these domains with domain 2, care provision and management, as a core elective course (60 credits) in the clinical competencies specific to a nursing speciality, for example: nephrology nursing and critical care nursing. The remaining domains need to be included as compulsory courses (60 credits) within the programme to develop the competencies of the APN.

Our institution has proposed a postgraduate diploma in APN with the following basic structure:

- Course 1: Scholarship in Advance Practice Nursing (year 1 compulsory - 30 credits)
- Course 2: Scientific Foundation for Specialist Nursing Practice (year 1 compulsory - 30 credits)
- Course 3: Clinical Speciality (year 2 elective – 60 credits)
    - Critical Care Nursing Child
    - Critical Care Nursing Adult
    - Psychiatric Nursing
    - Occupational Health Nursing
    - Infection Prevention and Control Nursing
    - Oncology and Palliative Nursing
    - Emergency Nursing
    - Midwifery and Neonatology Nursing

This study focuses on the design and development of Course 1: Scholarship in Advanced Practice Nursing.

1.5. Curriculum Development

The Department of Nursing Education at the university chose a concept-based approach to teaching and learning (Giddens & Brady, 2007; Giddens 2017; Ignatavicius, 2019). Grounded in the educational theory of constructivism, a concept-based curriculum focuses what students should do with information (action) rather than memorising the content (knowledge) of the course, encourages elevated levels of thinking; enables skills like clinical reasoning, clinical judgement and problem solving and prepares students for professional success (Giddens & Brady, 2007; Giddens 2017; Ignatavicius, 2019).

Constructivism views learning as a process rooted in the experiences of the learner. John Dewey was an educational theorist of the early nineties who viewed learning as follows: “If you have doubts about how learning happens, engage in sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence” (Dewey, 1910). He describes the acquisition of knowledge as a process of action, construction and reflection where the student considers the information presented, constructs their own ideas and reflects on new knowledge gained. The teacher on the other hand takes on the role of facilitator who asks questions to stimulate thinking (Dewey, 1910; 2016).

Pritchard (2009) describes constructivism within the broader field of cognitive science and identified six key features namely: knowledge is constructed not just reproduced; learning might lead to various views of what is considered a reality; authentic tasks to facilitate

situated learning; reflection on present and past experiences; collaboration and active participation; and finally autonomy in learning. Constructivism encompasses these criteria to facilitate deep learning. Educational approaches that fit into the theory of constructivism are problem-based learning, concept-based learning, and case-based learning to name a few. It is worth noting that these approaches are learner centred rather than teacher directed as seen in the behaviourist approaches (Brandon and All, 2010).

Nursing as a profession requires a curriculum that addresses knowledge, competence and attitude. Luckett (2001) presents a Model of an Epistemically Diverse Curriculum which illustrates the process and evolution of knowledge and competence within a professional nursing value system. Learning according to Luckett (2001) evolves from propositional knowledge with foundational competence; towards achieving epistemic knowledge and reflexive competence. This is metacognitive learning is represented by the students having the ability to apply and synthesize new knowledge, adapt to change and transfer new knowledge and competence appropriately in various contexts (Lindsay & Norman, 1972; Merrill, 1983; Baker & Brown, 1984 and West *et al.*, 1991).

Shay (2012) discussed re-contextualization of theoretical and practical knowledge within curricula and confers with Luckett (2001) that a professional curriculum moves from basic to complex. She highlighted the relationship between theory and practice. A professional person acts with confidence that can only be achieved if a person has the theoretical knowledge to justify their actions in practice (Shay, 2012). It is therefore important for the professional specific curriculum to enable the learner to extract themes or concepts across a variety of subjects and information sources, integrate the information and apply it to solve problems in a variety of contexts. This process of recognising differences between contexts, drawing on the evidence and theory and application of situation specific solutions is characteristic of scholarship (Shay, 2012). This fits into the Dreyfus Model of Skill Acquisition as described by Benner (1982) with five (5) levels of proficiency from novice, advanced beginner, competent, proficient, and expert. The learner develops not only clinical knowledge but also epistemic knowledge of the profession that will enable them to think critically and judge situations, change their behaviour accordingly and reflect on their experience thus demonstrating scholarship in practice (Benner *et al.*, 1992).

Advanced Practice Nurses (APN) should be, as stated previously, critical thinking, reflexive practitioners, and therefore a postgraduate diploma in APN should prepare them to apply scholarship in their nursing practice. The course on scholarship in APN should be designed to develop nurses that are engaged in lifelong scholarship, who are pro-active instead of reactive and focussed on quality improvement.

1.6. Conceptual Definitions

- ***Advanced Practice Nursing:***

For the purpose of this study APN includes all categories of advanced nursing such as clinical nurse specialists and nurse practitioners. The International Council of Nurses (ICN, 2008) defines an APN as: *"*a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice*".*

- ***21st Century Learning Design:***

21st Century Learning Design is a learner-centred pedagogy founded on the principles of social constructivism, which engages the students in real-word, social responsive problem solving and collaboration activities to foster the skills that will be valued in the 21st century world of work; particularly critical thinking and knowledge construction, self-regulation, skilled communication, innovation and creativity, the integration of technology and real-world authenticity. Teaching focus is on development of life-long learners within a specific professional domain, through creation of authentic learning experiences and opportunities to develop 21st century learning skills. The learning opportunities guide students to engage collaboratively and implement their response to real-world problems (Kereluik *et al.*, 2013).

- ***Concept-based curriculum:***

A concept-based curriculum consists of big transferable ideas presented as principles or concepts across the life span of people; it is not fixed in time or setting. Students use the concepts to make sense of the facts presented and of the world around them. It provides a way of organising information on a framework that they can build upon, making links between concepts. The student can then apply these principles in various populations, healthcare environment and disease profiles (Giddens & Brady, 2007).

- ***Scholarship:***

Scholarship refers to activities that systematically advance the teaching, research and practice of nursing through rigorous inquiry that is significant to the profession. Scholarship is inquiry that generates new, and tests existing knowledge through discovery. New knowledge produced facilitates lifelong learning and through collaboration and leadership may improve the quality of healthcare delivery to meet the needs of the patient, family,

caregiver and community. The pursuit of new ways to learn and grow will contribute to effecting change in the profession.

This definition is based on the model introduced by Boyer (1996) who highlighted 4 elements of scholarship that is appropriate for nursing practice. 'Scholarship of discovery' is the process of generating new knowledge or the validation of existing knowledge. 'Scholarship of integration' is the application of the knowledge in practice settings, challenging traditional nursing interventions and testing ideas using reflective practices. 'Scholarship of teaching' refers to disseminating information in and out of the profession and empowering members of the profession to develop their professional identity and the praxis of nursing. 'Scholarship of application' is using constructed knowledge to problem solve and apply this in the real world to effect change, provide quality service and grow the profession.

Scholarship although informed by research and evidence-based practice is not just an academic exercise but is applied in practice where constant inquiry and the willingness to scrutinize current practice underly the actions and decision nurses make in the clinical setting (Starr-Glass, 2011).

1.7. Problem Statement

Advanced Practice Nurses (APN) are a category of nurse who possess the skills and attributes to contribute to excellent patient care in a complex environment. The roles of the APN are diverse and require an expert knowledge base and inquiry skills that form the basis of evidence-based practice enabling the APN the autonomy to expand their practice. Equipping nurses to take on the role of the APN requires the development of an appropriate postgraduate curriculum that prepares nurses as specialists capable of critical thinking, being social responsive and as life-long learners. This requires a novel approach to curriculum development which enables graduates to function in the ever-changing complex South African healthcare environment.

In 2014, the SANC issued the generic competency framework for advanced practice nurses (SANC, 2014). Currently, students following courses in clinical nursing science leading to registration of an additional qualification, complete a course known as Professional Nursing Dynamics, which is largely content driven and does not meet the standards of scholarship required of the APN.

Evidence is needed to guide the development of content; the development of teaching strategies and assessment of a new postgraduate scholarship course to ensure well prepared professional APNs to respond adequately to the healthcare needs in South Africa.

1.8. Purpose of the Study

The purpose of the study was to develop an evidence-based scholarship course in APN as part of a postgraduate diploma in APN that is relevant and appropriate to the South African context. This course aims to develop the scholarship qualities needed for nurses graduating from this diploma and registering as Nurse Specialists who are critical thinkers, socially responsive and life-long learners capable of meeting the ever-changing needs of an overburdened, under-resourced South African health care system.

1.9. Significance of the Study

The significance of this study is that nurses graduating from this postgraduate diploma in APN will be the first to have a course focused specifically on scholarship in practice. While we are years away from realising the first graduates, their impact on the South African healthcare landscape will be evidenced by how they have been empowered through their scholarship skills. By ensuring that the 30 credit course on scholarship in APN speaks directly to the roles and characteristics of the APN that are identified as important for the South African nurse, the future Nurse Specialist will be able to tackle the challenges of our healthcare environment. The Nurse Specialist should have the strength of character to question the status quo, identify problems and opportunities, have the courage to act using evidence-based practice and lead the profession. A postgraduate diploma in APN that focuses simply on the clinical speciality area would produce highly skilled practitioners at best care for current practice but fail to achieve the qualities needed for innovation and change within the profession.

1.10. Research Question

How can an evidence-based curriculum be developed that intends to enhance critical thinking skills, promote social responsibility and drive students to embody life-long learning through a scholarship course in APN at a university in South Africa?

1.11. Aim of the research

This study aims to establish the roles, attributes and characteristics of the APN that is contextually relevant to the South African healthcare landscape in order to guide the development of the scholarship in APN course that will form part of the proposed postgraduate diploma in APN.

1.11.1. Research Objectives

1. To explore the roles, attributes and characteristics of an APN as identified in international literature (Phase 1).
2. To identify the concepts that emerged in phase 1 that are most important for the South African context and should thus form the basis of the scholarship in APN course (Phase 2).
3. To design and develop the teaching plan (teaching, learning and assessment strategies) for the scholarship in APN course (Phase 3).
4. To evaluate and validate the scholarship in APN course teaching plan that was developed in phase 3 for feasibility, applicability and appropriateness in the South African context within a postgraduate diploma in APN (Phase 4 and 5).

1.12. Organisation of Thesis

Table 1.1 details the organisation of the eight (8) chapters of this thesis.

Table 1.1 Organisation of Thesis

Chapter	Content
Chapter 1 **Overview of the study**	Introduction and background of the study.
Chapter 2 **Research methodology**	Description of the research methodology used in the phases of the study to answer the research question.
Chapter 3 **Scoping review**	Phase 1 of the study: Scoping review of the literature on the roles and attributes of APN.
Chapter 4 **Concept development**	Phase 2 of the study: • Rank order scale method to identify roles of APN in the South African context. • Nominal group discussion for consensus and develop the concepts for inclusion in the course.
Chapter 5 **Development of the teaching plan**	Phase 3 of the study: Design and development of course content with appropriate teaching, learning and assessment strategies.
Chapter 6 **Internal review and evaluation of course**	Phase 4 of the study: Internal consensus review of the quality of the teaching plan.
Chapter 7 **Validation of course**	Phase 5 of the study: Expert external evaluation of the developed course using a course evaluation tool to validate the course design.
Chapter 8 **Summary of main findings, Limitations, Recommendations and Conclusion**	Summary of the main findings of the study, acknowledgement of the limitations of the study and a conclusion with recommendations for further research.

1.13. Conclusion

An overview of the study has been provided in Chapter 1. The research methodologies applied in this study will be described in Chapter 2.

Chapter 2. Research Methodology

2.1. Introduction

In this chapter the research methods used to design and develop a scholarship course in APN will be described. This chapter explains the research design and methodology, thus providing detail of the research paradigm, the research process and the rigor applied in this study.

2.2. Research Paradigm

A research paradigm can be defined as a comprehensive believe system, worldview or framework that guides the research process to influence practice (Taylor & Medina, 2013 and Brierley, 2017). A research paradigm, from a philosophical perspective, is distinguished from the day to day use of the term paradigm by the inclusion of four (4) elements namely: epistemology, which describes the nature of knowledge - knowing why we know what we know (source of knowledge); ontology, which describes the researcher's view of the nature of reality; methodology, which refers to the approach followed to generate knowledge and lastly axiology, which encompass the ethical issues to be addressed in a research study (Taylor & Medina, 2013 and Kivunja & Kuyini, 2017;).

The pragmatic paradigm is concerned with the utility or "what works"; knowledge is developed not only to represent reality but also to be useful in the real world. It implies that a single research method will not provide a suitable answer to the research question, but rather in choosing multiple and fitting methods the research outcomes are supported and validated. This does not mean that in the pragmatic paradigm anything goes, nor is it a haphazard approach, but rather follows a systematic and scientific integration of research methods and interpretation of results to inform practice. The pragmatic paradigm merely underscores the fact that phenomena have various layers and a single research method cannot provide answers to all the layers thus suggesting a mixed-methods approach. To provide an enriching understanding of the phenomenon, it should be viewed from different perspectives, allowing for the emergence of new dimensions. The worldview emphasis is on the real world workability of the research product and the adoption of a research design and methods that are best suited for discovery of novel connections and knowledge construction to better understand the research context (Brierley, 2017; Feilzer, 2010).

The pragmatic paradigm as a worldview resonates with the researcher because of the focus on the practical application of the research findings and solving the research problem by integrating different perspectives (collaboration) to best interpret the emerging data. The pragmatic paradigm is characterised by communication and shared meaning-making in the creation of practical solutions to existing problems. More importantly it is outcome-orientated and focused on the product of the research (Shannon-Baker, 2016). As a nurse educator and researcher, being a pragmatist is at the core of being able to deliver evidence-based curricula that are realistic, meaningful, and practical.

In the pragmatic paradigm the research problem determines the epistemology, ontology, and axiology of the research, rather than focusing on the methodology, as illustrated in table 2.1.

- The epistemology underlying this study is based on the understanding that knowledge is gained inductively and arises from exposure to different situations and is therefore gained through personal experience. A pragmatic approach centres on an evolving methodology and its connection to epistemology. The researchers' epistemological understanding of the world is reflected in the interpretation of the findings. To be pragmatic is to commit to uncertainty and acknowledge that knowledge produced is relative and is meaningful to the individual. It is recognising and accepting that relationships exists but are subject to change due to various factors which require the researcher to be curious, reflexive, adaptable and reflective.

- The ontology, or the reality of APN, is currently being debated and interpreted within the South African context as evidenced by the lack of promulgated regulation despite the framework for general competencies of the APN being published in 2014. The reality of an APN category of nurse in South Africa is constantly being renegotiated due to dispute of opinion between stakeholders in government, higher education, regulatory bodies, and the healthcare providers themselves. This reinforces the need for this study to explore and provide evidence of the critical concepts supporting scholarship in APN.

- Axiology in the pragmatic paradigm is value-laden because of the shared decision making and collaboration of community members to reach consensus and therefore have to ensure that all perspectives are valued and represented. Results are analysed with transferability into other nurse education settings in South Africa in mind.

Table 2.1 Overview of applied research paradigm

Paradigm	Ontology	Epistemology	Axiology	Theoretical perspective	Methodology
Pragmatism: Worldview of practical applied research, integrating collaborative responses from researchers and practitioners	Perceptions of reality: Recognise and accept that reality is subject to change due to various factors	Knowing: in the pragmatic paradigm epistemology is that of finding knowledge to solve a problem The knowledge produced is relative and not absolute	Value system: what value system is held by the researcher that influences the research outcomes. Value-laden	Approach to follow in gaining information	Process followed to finding information
Research in action to answer the research question: How can an evidence-based curriculum be developed that will enhance critical thinking skills, promote social responsibility and drive students to embody life-long learning through a scholarship course in APN at a university in South Africa? The research draws on collaboration between researcher and clinical specialists.	The reality of the APN in South Africa is constantly subject to renegotiation depending on the situation and social context.	Exploring what is known about APN and how to use that knowledge to introduce APN in the South African context	The researcher values collaboration and shared decision making, respecting the opinions of others without imposing personal bias on the interpretation of the data.	The three theoretical frameworks underpinning this research are: • Understand by Design (Wiggins *et al*., 2005) • Concept-based learning (Erickson *et al*., 2008) • 21st Century Learning Framework (Kereluik e*t al.*, 2013)	Research method using DDR (Ellis & Levy, 2010)

Kivunja and Kuyini (2017) described the pragmatic paradigm within the education research domain. The pragmatic paradigm draws elements from the other paradigms and encapsulates approaches to research that could be more practical and allow for the use of multiple methods to understand human behaviour. The pragmatic paradigm is concerned with relational epistemology, a non-singular ontology, a mixed method methodology and a value-laden axiology that resonates with the purpose of this study.

2.3. Research Design

Embedded in the pragmatic research paradigm is the theory of Design and Development Research (DDR) which seeks to create knowledge grounded in data which is systematically derived from practice. Van den Akker *et al.* (2010) defined DDR as "a systematic study of designing, developing and evaluating educational interventions (courses, teaching and learning strategies and material) with the aim to solve complex educational problems and to advance our knowledge about the characteristics of these interventions and the processes to design and develop them". DDR provides a way to test theory, validate practice and establish new procedures, techniques and tools based upon a methodical analysis of specific cases (Ellis & Levy, 2010). It is further supported by Barab and Squire (2004), who stated that DDR is an assortment of methodologies with the aim of producing new artefacts and practices which have the ability to impact learning and teaching.

Van den Akker (2007) and Ellis and Levy (2010) differentiated DDR from product development on the basis that a research project establishes and validates the criteria that the product must meet by addressing an acknowledged problem. It follows a formalised and accepted process for developing the product, building on existing literature and finally the product is subjected to a formalised evaluation process which contributes to the body of knowledge. Using accepted research methods, accounted through rigorous documentation of the process, and communicated to the wider community distinguishes the design and development process as a research framework. Product development in isolation of DDR, on the other hand, lacks a systematic investigation of the literature to address the problem; decisions for design are not embedded in a theoretical rationale and does not require analysis and reflection of the process and outcomes.

The design and development framework is central to education research where designing a curriculum is involved. The framework includes a common set of characteristics, such as a focus on measurable goals and outcomes derived through an initial analysis phase, the selection of content and strategies that match these goals, a process of routinely evaluating

the products (curriculum) prior to finalizing the project, and the assessment of the learning and performance outcomes (van den Akker *et al.*, 2000). The goals for educational DDR are to develop knowledge or solutions and is conducted in three (3) phases that are cyclic in nature: analysis – design – evaluation. The emphasis is to improve understanding of how to design for implementation.

Ellis and Levy (2010) described the DDR process in six (6) phases as illustrated in figure 2.1. These phases are detailed in 2.3.1 to 2.3.6 below.

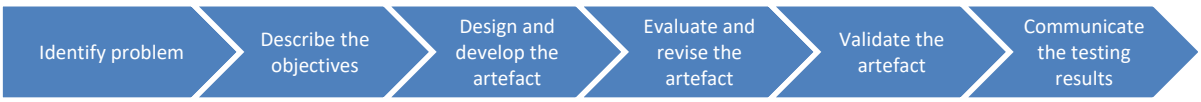

Figure 2.1 The 6-phase design and development research approach
(adapted from Ellis and Levy 2010)

2.3.1. Identify the problem

Any research project starts with a clearly articulated problem. It is, however, important to determine if a research-worthy problem is appropriate for DDR (Ellis & Levy, 2008). Richey and Klein (2007) state that there are three (3) sources for research problems appropriate for DDR which include workplace settings and work-based projects; new technology and emerging theory in a specific field of study. However, literature can also be used to identify a research problem especially from the stance of what the study will add to the knowledge base. This is true for most educational studies conducted using the DDR research framework. Richey and Klein (2007) viewed application of DDR in curriculum development is driven by six (6) major components:

- Learners and how they learn.
- The context in which learning, and performance occur.
- The nature of content and how it is sequenced.
- The instructional strategies and activities employed.
- The media and delivery systems used.
- The designers and processes used by them.

It should, however, be noted that their approach to education is more related to technology systems design and educator lead instruction but is applied from a constructivist perspective in this study.

The drive behind this study was the introduction of APN in the South African context, which requires the development of a curriculum to prepare specialist nurses to take on the role of

APN (SANC, 2013). The workplace-based problem is evidenced in the lack of clarity of the role of the APN in the South African contexts and within this the characteristics and aptitudes of scholarship that are associated with this role (refer to Phase 1 method: 2.5).

2.3.2. Describe the objectives

Setting objectives for the desired product/artefact enables the establishment of study parameters and will ensure that the full cycle of development will be addressed in each phase. Richey and Klein (2007) suggest, when formulating objectives, aspects such as the scope of the study, format of evaluation and what outcomes will be measured should be considered (refer to Phase 2 method: 2.6).

2.3.3. Design and develop the artefact

An artefact in the context of DDR can be divided into two (2) categories: product and tool research or model research. Product and Tool research includes the design and development of instructional products and programmes as well as non-instructional products and programmes; tool development; and tool use. The specific phases relevant to this category includes analysis, design, development and evaluation. Model research includes model development or model component processes which focuses mainly on internal validation of the model components and external validation of the model impact (Richey & Klein, 2007).

Regardless of the chosen category, this phase is driven by building a conceptual framework which connects the prototype or artefact being developed to the problem driving the development. The phase is further characterised by following iterative processes and consultation to refine the artefact or prototype (van den Akker *et al.*, 2010). The framework includes various stakeholders' inputs ranging from experts to potential users and literature reviews to ensure validity (Ellis & Levy, 2010).

Van den Akker (2000) described the importance of the rigorous documentation of alternative solutions and the decision-making process in the development of the artefact. Ellis and Levy (2010) recommend that when using design and develop research, it should be anchored in literature and prior tested models. Initial prototype design follows three steps: 1) analysis, 2) development and 3) evaluation. This prototype is then put forward to the testing and evaluation phases of DDR (Ellis & Levy, 2010) (refer to Phase 3 method: 2.7).

2.3.4. Evaluate and revise the artefact

It is important for the artefact that is developed to meet the set objectives. The approaches to artefact testing may be through comparison to existing similar artefacts (e.g. other curricula and literature), review by internal stakeholders who may implement the curriculum (as applied in this study, Phase 5 method: 2.8) or in implementation as a pilot with the proposed target audience (this was not possible within the scope of the current legislation). The artefact is typically modified to accommodate the outcomes of this initial testing phase.

2.3.5. Validate the artefact

Validation of the modified artefact can be achieved directly through a pilot study and observation or indirectly using review tools or an expert panel to determine if the modified artefact meets the identified requirements, is supported by the literature and that the value of the artefact is accepted within the review process (Ellis & Levy, 2010). The indirect approach was adopted in this study as described in the Phase 5 method: 2.9.

2.3.6. Communicate the testing results

Ellis and Levy (2010) stated that in this last phase, disseminating the results contributes to the body of knowledge and can reflect both the research process and / or the design process.

In this study the results of the research will be communicated through conference proceedings and publications in peer reviewed journals and the curriculum accreditation processes of the university.

2.4. Data collection methods

Implementing research within the pragmatic paradigm focuses on practical, applied research using collaborative practices to integrate different perspectives in the interpretation of the data. This leads to the research design that underpins this project, design and development, which is pragmatic by nature and tests theory and validate practice. The theory assists with informing practice standards through research and research originate from practice to create knowledge and solve practical problems (Richard & Klein, 2007 and Ellis & Levy, 2008). The design and development research phases directed the process of inquiry in that it allows for multiple forms of data collection.

The choice of data collection methods for the phases of the study were guided by Creswell's (2014) explanation of data collection methods from both quantitative and qualitative sources within three (3) dimensions as illustrated table 2.2.

Table 2.2 Data collection methods

Experiencing	Enquiring	Examining
Researchers and participants draw upon own experiences	Collecting new information in various ways	Researchers make and use records or documentation
Field notes from researcher and committee members	Asking questions to solve real world problems	Review documents Write notes
Researcher active participation in meetings and group discussions	Consensus groups Evaluation forms	Review material developed.

The research data collection methods employed within the phases of the DDR process, geared to find practical solutions for a workplace-based problem are described in table 2.3.

Table 2.3 Overview of Research Methods per Phase

Phase	Data Collection Method	Aim of the phase	Sample and sample method
Phase 1: Problem Identification	Scoping Review	To explore the role of an APN as identified in international literature.	Peer reviewed English Literature Data bases: EBSCOhost, CINAHL, ProQuest, Medline and ScienceDirect
Phase 2: Describe the objectives (scope)	Rank order technique	To establish the relative importance of the roles of APN within the South African context	Professional nurses with an additional speciality qualification Purposive sampling
	Nominal group	To gain consensus on the roles of APN for inclusion in the course Identify concepts related to the roles of APN.	Professional nurses representing speciality areas in nursing Purposive sample
Phase 3: Design and Develop the artefact	Design and Development	To map the course content with chosen teaching and learning strategies and assessment (teaching plan development)	Literature on course development Educational theories
Phase 4: Test the artefact	Workshop	To test the course for appropriateness and inclusiveness	Postgraduate Curriculum Committee Purposive sample
Phase 5: Evaluate testing results	Expert review	To evaluate if the course meets the objectives and standards for APN	Expert panel Purposive sample

Further detail on the data collection methods are provided in 2.5 – 2.9.

2.5. Phase 1: Problem identification

The first phase in the DDR is to identify and explore the problem. This study aims to develop a course in scholarship in APN as part of a postgraduate diploma in APN as a new nursing qualification in South Africa, the Nurse Specialist. To meet the first objective of this study: to explore the roles, attributes and characteristics of an APN as identified in international literature, a scoping review of the literature was required.

There are various forms of literature reviews; the purpose, evidence required, and the research question determine the type of literature review to employ (Munn *et al.*, 2018). The Joanna Briggs Institute (JBI) identified 14 types of literature reviews, each involving unique methodology, of which the scoping review is one (Peters *et al.*, 2015 and Tricco *et al.*, 2016). The first framework for conducting a scoping review was reported on in 2005 by Arksey and O'Malley, with suggested enhancements from Levac *et al.* (2010), however, still lacking a clear definition and method structure (Colquhoun *et al.*, 2014; Peters *et al.*, 2015 and Tricco *et al.*, 2016). Scoping reviews are similar in the structured process followed by a systematic review, however, as reported by Munn *et al.* (2018) there are key methodological differences.

2.5.1. Scoping Review Method

The overall drive to conduct a scoping review is to identify and map the evidence (Daudt *et al.*, 2013; Colquhoun *et al.*, 2014; Peters *et al.*, 2015; Tricco *et al*., 2016 and Munn *et al.*, 2018), being mindful that the scoping review question is aligned with the purpose of the study. Scoping reviews do not require critical appraisal of the evidence as the results are not used to answer a clinical question that informs practice, but rather maps the concepts and establishes the characteristics of the concepts. Munn *et al.* (2018) summarised the indications for conducting scoping reviews as follows:

- To identify available evidence in a field of study
- To clarify key terms/concepts/definitions found in the literature (specifically relevant in this study)
- To examine how, in a specific field, research was conducted
- To identify concept characteristics or factors (specifically relevant in this study)
- To be a foundation for conducting a systematic review
- To identify knowledge gaps in the field of study.

Tricco *et al.* (2016) stated that a scoping review presents a wide-ranging overview of the evidence related to a specific topic and does not necessitate an analysis of the quality of the

chosen studies. The scoping review method is designed to allow for searching and incorporating all forms of literature and evidence relevant to understanding the topic rather than the appraisal of the quality of evidence (Aveyard *et al.*, 2016).

2.5.2. Process of the Scoping Review

A scoping review is a type of knowledge synthesis and should be guided by a methodological framework to ensure validity. Rigorous documentation of methods used will provide a scientific basis for replication which increases the reliability of the scoping review (Arksey & O'Malley, 2005). Based on the original works of Arksey and O'Malley in 2005, the Joanna Briggs Institute published a methodological guideline for conducting scoping reviews in 2015 (Peters *et al.*, 2015 and Tricco *et al.*, 2016) which was applied in this study and includes the following steps:

(1) identifying the research question; (2) identifying the relevant studies; (3) study selection; (4) charting the data; (5) collating, summarizing and reporting results; (6) consultation.

These six (6) steps will be discussed in 2.5.2.1 to 2.5.2.6 below, as applied in this scoping review.

2.5.2.1. Identify review question

The starting point of any research study is the research question that guides the choice of research strategies. Arksey and O'Malley (2005) stated in scoping reviews, the formulation of a research question is of utmost importance as it highlights the focus and parameters of the scoping review. The research question will then direct the objectives and inclusion criteria used in the subsequent steps (Peters *et al.*, 2015).

The research question used in this scoping review was: "What are the roles of Advanced Practice Nurses?"

2.5.2.2. Identification of relevant studies

The inclusion of studies in a scoping review should be comprehensive. A search strategy to find literature should be developed from the onset and documented for replication purposes (Arksey & O'Malley, 2005 and Pham *et al.*, 2013). Literature can be searched from various sources such as electronic data bases, reference lists, hand-searching key journals or existing networks. For each of the sources identified search parameters such as the inclusion criteria should be described for consistency (Arksey & O'Malley, 2005 and Peters *et al.*, 2015).

For the purpose of this study data sources considered related to the context, which for the purposes of this scoping review were international perspectives which determined the parameters or scope of the study. Data sources used were electronic data sources: EBSCOhost, Medline, ProQuest and Science Direct. From there the reference lists were accessed to ensure inclusiveness as the date parameters were set for articles published since 2010.

2.5.2.3. Study selection

Study selection is based on setting inclusion and exclusion criteria to minimize the chance of picking up irrelevant studies. Arksey and O'Malley (2005) stressed the importance of defining terminology at the onset to enable breadth and not depth with selecting articles for inclusion as well as inclusion and exclusion criteria to be applied to all articles. Following this process will ensure consistency in the researcher's decision-making.

The process is described in chapter 3.

2.5.2.4. Charting the data

This process involves the decisions about what information is required for analyses from the screened articles and should be aligned to the scoping review question and objectives for the review (Arksey & O'Malley, 2005 and Peters *et al.*, 2015). Arksey and O'Malley, 2005 provided a framework to collect standard information about the studies reviewed and requires a data extraction form (Pham *et al.*, 2013).

In this part of the review all decisions should be documented to ensure replication and should include a flow chart detailing the process, results, removal of duplicates and the inclusion via other sources such as the reference list (Peters *et al*., 2015 and Aveyard *et al.*, 2016). Whittemore and Knafl (2005), also supported the development of a data extraction tool which will assist in the following steps of the review and suggested the information extracted should be informed by the review question and objectives.

For the purpose of this study the information charted on the data extraction tool were: the author, the country of origin, the year of publication, study objectives, population and sample, study design and lastly a column reporting key terms related to APN identified in the results/findings section of each study. This is displayed in chapter 3.

2.5.2.5. Collating, summarising and reporting of results

This step involved the representation of the results. As Arksey and O'Malley (2005) stated, it is important to present an overview of all material reviewed and scoping reviews lend itself to present findings in two ways, the first analysis is on the demographic information of the

reviewed articles, which includes productivity and methodological analysis (Zuriguel Perez *et al.*, 2015) which shed light on the context of the studies under review and in turn might influence the interpretation of the findings in the second analysis. The second analysis involves analysis of the findings with the main purpose of sensemaking to gain understanding of the topic or concept.

Bengtsson (2016) and Graneheim *et al.* (2017) discussed the content analysis process as inclusive of manifest data or concrete data, which is surface data with a low level of interpretation but merely representing what has been said intext, and latent data (deep data) where the researcher finds the underlying meaning of the text. Hsieh and Shannon (2005) described three (3) types of content analysis and the one applied for this scoping review was that of summative content analysis.

Summative content analysis is initiated by looking at the manifest data in a quantitative manner (Hsieh & Shannon, 2005) by identifying and quantifying words through the collection of surface data to explore usage and not to infer meaning. This process was done to identify the roles of APN as it appears in text. The second step of summative content analysis is the latent content analysis with an emphasis of discovering underlying meaning of the content and as Bengtsson (2016) explained, *"latent analysis is extended to an interpretive level in which the researcher seeks to find the underlying meaning of the text: what the text is talking about."*

2.5.2.6. Consultation (optional)

Arksey and O'Malley (2005) and confirmed by Tricco *et al.* (2016) stated that the consultation phase might be useful in contextualizing the findings of the scoping review, however, is not always possible to conduct. Although the framework of the SANC (2014) was used during the analysis phase no consultative meeting was set.

The results of the scoping review were used in the development of the concepts (phase 2 of the study).

2.6. Phase 2: Concept analysis, clarification and exploration

Phase 2 of the DDR process involved the setting of parameters in the design process. In course development this requires the agreement on course content for inclusion, in this instance the first step of developing a course for APN is to identify concepts that will guide the development of the course. Beecher *et al.* (2019) provided an overview of concept development strategies used in nursing.

- Concept analysis – developing a concept previously defined and clarified in the literature and is based on the theory of Walker and Avant.
- Concept clarification – refining excepted concepts in nursing to get consensus on the meaning and attributes of the concept.
- Concept exploration – answering questions on ambiguous concepts for further development in the nursing context.

Advanced Practice Nursing (APN) is not a new concept in the international arena, however, in the South African context, programmes for the preparation of an APN have yet to be developed and the Nurse Specialist is not yet a recognised role within the local healthcare landscape. As scholarship in practice is seen as a fundamental desired quality of the Nurse Specialist, it is vital to explore, clarify and analyse the constructs that emerged in the phase 1 scoping review for contextual relevance and inclusion in the artefact. The processes required consultation and agreement from stakeholders and is explained below.

2.6.1. Rank order scale

From the scoping review, key terms were identified and used to collect actionable ordinal data to organise the information. Ordinal data is one of four (4) levels of measurement within quantitative research and can be used to identify the relevant position of an item on a scale, but not the absolute quantities or distances from each other, showing the sequence only rather than measurement (de Vos *et al.*, 2017). The data collection method used was a rank order scale to collect ordinal data and was done on the basis of a respondent placing the phase 1 identified terms in a sequential order of importance (de Vos *et al.*, 2017). The terms were not rated but rather ranked from highest to lowest value from the perspective of the respondent.

2.6.1.1. Objective

This phase addressed objective 2 of the study: To identify the concepts that emerged in phase 1 that are most important for the South African context and should thus form the basis of the scholarship in APN course. The ROS was to identify the roles and attributes considered by specialist nurses in the South African context as important and relevant for their specific speciality.

2.6.1.2. Sampling

A non-probability sampling method was used for the ROS, accessing professional nurses who are considered to be experts due to their experience in a speciality field of nursing. Respondents invited to complete the ROS were professional nurses, with an additional qualification in various specialities inclusive of nursing education, nursing management,

trauma and emergency nursing, critical care nursing, psychiatric nursing, advanced midwifery, infection prevention and control nursing and oncology nursing. These specialities are representative of the qualification streams to be offered in the postgraduate diploma in APN at the university.

The sample for this phase of the study was identified by accessing the graduation records of master's degree holders from the Department of Nursing Education from the university in the last ten (10) years. Those with personal email addresses available within the departmental records were included and invited to participate.

2.6.1.3. Data collection

The ROS was designed as a survey in the RedCap® electronic data collection and management system. The survey comprised of a question to identify the speciality of nursing of the respondent and two ranking questions. There were no respondent identifiers associated with the survey, thus all responses were anonymous.

The ROS comprised of two (2) parts: ranking of the 16 roles of APN and ranking of the 12 attributes of APN that emerged out of phase 1. The respondents were asked to rank each item within a part in order of importance for their specific speciality from most important (one) to least important (sixteen for the roles and twelve for the attributes). The ROS was piloted on seven (7) students who were enrolled in the clinical master's programme at the time, in order to establish the face validity of the ROS and to determine the time required for completing the survey instrument. The feedback from the students indicated no changes to be made to the ROS.

The survey was then distributed via a link in an email to the identified sample with two reminders and after 8 weeks was closed for analysis.

2.6.1.4. Data analysis

For the purpose of this study a statistical package for analysis was not needed as the data was extracted from RedCap® onto a Microsoft Excel sheet which provided the needed tools to analyse the data set. Rank ordering requires ordinal data indicating sequence only through placement of the roles (1 – 16) and attributes (1 – 12) in order of importance. Once captured on Microsoft Excel the data set was cleaned through removing the incomplete responses as well as the partially completed responses ensuring accurate calculations.

The summary score for each role or attribute was calculated using the rank order to importance score conversion shown in Table 2.4 as suggested by Kleiner-fisman *et al.* (2013) as a sum of the responses. By ranking an item as first (one), the respondent is

associating it with the most important placeholder thus worthy of a high score i.e. 16 for the roles and 12 for the attributes.

Table 2.4 Scoring template explained

Calculation formula for ranking the roles of APN				Calculation formula for ranking the attributes of APN			
Item rank order	**Importance score**	**Item rank order**	**Importance score**	**Item rank order**	**Importance score**	**Item rank order**	**Importance score**
1	**16**	9	**8**	1	**12**	7	**6**
2	**15**	10	**7**	2	**11**	8	**5**
3	**14**	11	**6**	3	**10**	9	**4**
4	**13**	12	**5**	4	**9**	10	**3**
5	**12**	13	**4**	5	**8**	11	**2**
6	**11**	14	**3**	6	**7**	12	**1**
7	**10**	15	**2**				
8	**9**	16	**1**				

Table 2.5 provides an example of the summary score calculation for a role:

Table 2.5 Summary score calculation

Respondent	Rank order	Importance score
A	seventh	10
B	thirteenth	4
C	second	15
Summary Score:		29

The summary scores for the roles part and the attribute part were then sequenced by score from highest to lowest, where the lowest number indicates the least important role or attribute and the highest number the most important role or attribute for APN in the South African context.

2.6.2. Nominal group method

The second part of the process for this phase of the study involved getting consensus on the topics to be included in the course. The method chosen for this part of the study was a

nominal group discussion, a technique that allows collaborative consensus within a group which will establish priorities for action (King *et al.*, 2019).

A nominal group allows shared decision making, clarification of ideas, identifying areas of consensus, which creates a greater sense of ownership by the participants, increasing the development of actionable outcomes (Harvey *et al.*, 2012; Varga-Atkins *et al.*, 2017 and McMillan *et al.*, 2016).

The nominal group technique, originally established by Delbecq *et al.* (1975), consists of five (5) stages guided by a facilitator combining individual work, ensuring that all participants' voices and opinions are heard and considered, and group work that enables clarification and consensus around ideas (Varga-Atkins *et al.*, 2017). An adapted nominal group was conducted in this study as described in Chapter 4.

2.6.2.1. Objective

Ensuing from the rank order scale, consensus on the concepts for inclusion in the course to prepare APN was the next step to identify relevant topics spanning over all nursing specialities.

2.6.2.2. Sampling

Non-probability sampling method was used for this stage and professional nurses with a master's degree in a nursing speciality area were invited to participate in the nominal group. Ten (10) professional nurses from various backgrounds including the private and public sectors were invited and seven (7) professional nurses participated in the nominal group. Table 2.6 reflects the speciality areas represented in the nominal group.

Table 2.6 Nominal Group Participant background

Participant	Description
Researcher	Facilitator of the nominal group
Research supervisor	Moderator, observer and note taker
Professional nurse 1	Speciality: ICU Sector: Public
Professional nurse 2	Speciality: Primary Health Sector: Private
Professional nurse 3	Speciality: Infection Control Sector: Private
Professional nurse 4	Speciality: Nursing Education Sector: Private
Professional nurse 5	Speciality: Midwifery Sector: Public
Professional nurse 6	Speciality: Nursing Education Sector: Public
Professional nurse 7	Speciality: Trauma and Emergency Sector: Public

2.6.2.3. Process

The steps followed were an adaptation of the traditional steps of a nominal group as described by McMillan *et al.* (2016). Figure 2.2 exemplifies the traditional steps of a nominal group (in blue) and the adaptation (in green) which was followed in this study.

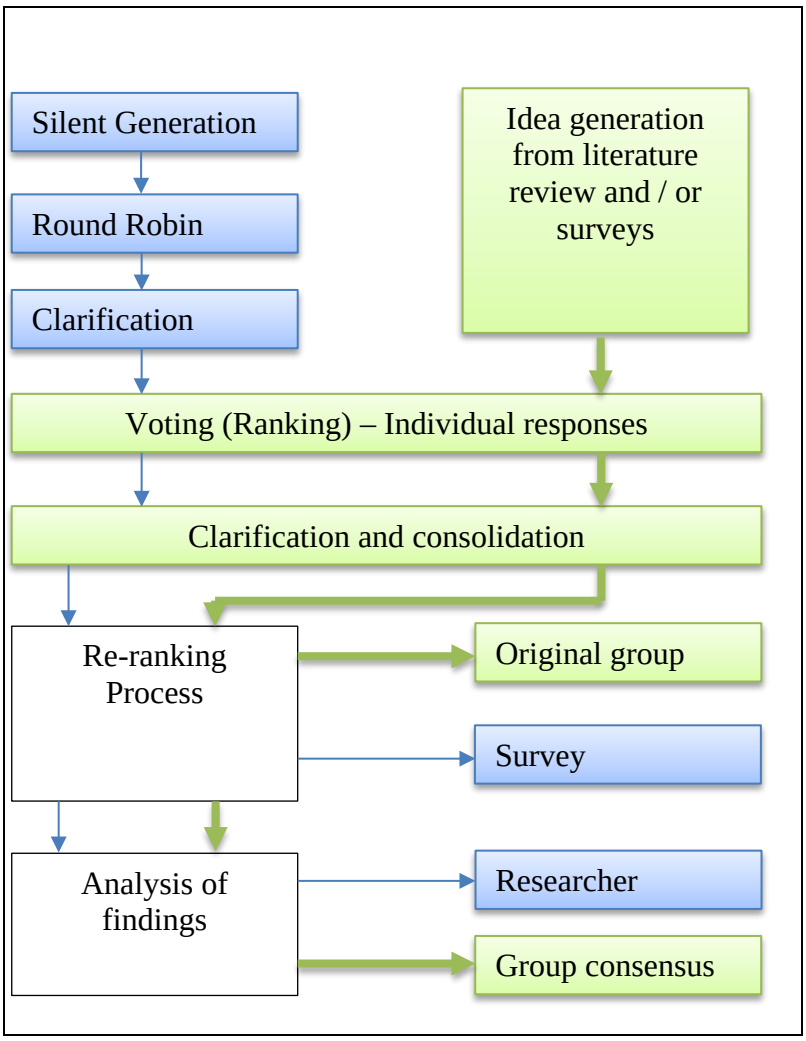

Figure 2.2 Model for Nominal Group discussion

Step 1: Idea generation – ideas were generated from the scoping review (Chapter 3) and further explored during the first stage of this phase namely the rank order scale. This adaption was necessary because of the nature of the content to be discussed. APN is new in the South African context although we have nursing experts in various fields or speciality areas guidance was needed from the international literature to ensure alignment of the content.

Step 2: Voting (Ranking) Individual responses – in this step the participants were asked to identify their top five (5) roles from the list provided, for their specific speciality and write a

motivation why they consider this as important on the back of the card. They were also presented with the opportunity to add any additional professional roles and/or responsibilities of an APN they considered to be relevant and important specifically for the South African context.

Step 3: Clarification and consolidation – this step was facilitator led to ensure every participant's voice was recognised and could individually clarify their opinion for their choices. This is an important step to ensure all the participants had the same understanding of the respective roles and how it applies to the various speciality fields in nursing.

Step 4: Re-ranking responses – from the clarification and consolidation step the participants had an opportunity to revise their responses and ask questions to ensure the most important ideas, in this case the most important roles for APN, has been captured to the satisfaction of the whole group.

Step 5: Whole group consensus – the final step fed into the data analysis where the group clustered the ideas into themes or concepts identifying the key terms related to the concept constructed.

2.6.2.4. Data analysis

Nominal groups are a brainstorming method to reach consensus on action points as the end result. Analysis is part of the nominal group discussion with thematic grouping by the participants as the last phase of the discussion (Bramley & Matiti, 2014). The researcher verified the consensus findings through a process of developing concept definitions, applying critical and analytical thinking to find comparisons from the literature and training standards to elaborate on the themes and relationships identified within the nominal group (Kelz *et al.*, 2019). Following this the concept definitions were circulated to the participants for member checking.

2.7. Phase 3: Design and develop artefact

The third phase of DDR process is the development of a prototype, and for this study was the development of the Scholarship course for APN which is one of three (3) courses that forms the postgraduate diploma programme for specialist nurses.

The Department of Nursing Education at the research setting has introduced concept-based learning as their approach to teaching and learning for all the undergraduate and postgraduate programmes offered at the research setting and this approach steered the development process for the course on Scholarship for advanced practice nursing. The

move towards a concept-based curriculum (approach to learning) was informed by the need to embrace newer models of teaching and learning to overcome the content overload of an everchanging healthcare environment, but also to incorporate the acquiring of skills required by industry (Giddens *et al.*, 2020). The benefits of a concept-based curriculum include the management of excessive content; if done correctly it will actively engage the student in the learning process resulting in synergistic thinking; further the ability to transfer knowledge to manage complex systems (Erickson, 2008).

The researcher explored teaching and learning approaches relevant to constructivist theory in order to develop the Scholarship course for APN. Exploring the educational science of learning the researcher found resonance in the three (3) stage Backward Design, under the umbrella of "*Understanding by Design*", as explained by Wiggins *et al*. (2005), its main objective is expanding the students' ability to make meaning of big ideas and transfer learning to solve complex real-world problems and it fits into the requirements for concept-based learning (Wiggins *et al*., 2005; Emory, 2014; Giddens *et al.*, 2020).

The Backward Design stages begin with the end result in mind and require the setting of learning goals which is also, according to Giddens *et al.* (2020), the first decision to be made when developing a concept-based curriculum. The second stage of the Backward Design is "*evidence*" and the educator have to think about what the student should be able to do or present to demonstrate the acquiring of understanding and the transfer of knowledge. The third stage "learning plan" involves the structuring of learning events to provide opportunities for the student to engage with the content (Wiggins & McTighe, 2011). The stages of the Backward Design provided an overarching structure for the course development process providing a framework to guide the development of teaching plans in order to present each concept (Giddens *et al.*, 2020).

Lyn Erickson is known as a leading expert (Wiggins & McTighe, 2011; Giddens *et al.*, 2020) in designing and developing concept-based courses. Erickson *et al.* (2017) described 11 steps (figure 2.3) for concept-based unit design and although aimed at secondary education level, provided direction in constructing the teaching plan for each concept.

1. Create the unit title	• Provide the content focus and should provoke inquiry and engage the student in active thinking and reflection.
2. Identify the conceptual lens	• Is a concept that provides focus and depth; determine the direction of the unit and ensures conceptual thinking.
3. Identify the unit strands	• This is subject areas which breaks the unit into manageble parts and represents the dimensions of the learning process.
4. Web out topics under the strands	• This is a brainstorming process to provide an overview of the unit content and concepts for development in later stages.
5. Generalisations (what students must understand)	• Generalisations are conceptual ideas the student needs to understand and is linked to practice standards which also determine if the emphasis will be on content or processes.
6. Develop guiding questions	• Guiding questions assist student thinking towards the generalizations and should be either a factual, conceptual or provocative question. • Having conceptual understanding the student will gain depth and transferability in their thinking
7. Identify critical content (what students must know)	• Critical content is the factual knowledge needed to ground the generalisations. It is a LIST of content that must be taught explicitly in the unit.
8. Identify key skills (what students must be able to do)	• Key skills are drawn from the course outcomes which is aligned with the level descriptors of the programme. • These skills transfer across applications and is not restricted to a particular unit.
9. Write culminating assessment	• The culminating assessment reveals the students' understanding of the generalisations, critical content and mastering of the key skills.
10. Design learning experiences	• Learning experiences reflect what the student should know, understand and be able to do at the end of the unit.
11. Write the unit overview	• The unit overview is the last section to be written and introduce the student to the unit, grab their attention and spark their interest to get them motivated to learn.

Figure 2.3 Steps in concept-based unit design (Erickson *et al.*, 2017)

The researcher followed the Backward Design stages when decisions regarding the content were made; however, the steps of Erickson *et al.* (2017) were consulted to ensure each element was included in the teaching template but not necessarily in the order presented.

In Chapter 5 the development process for each concept is discussed in detail highlighting the decision-making processes the researcher followed to produce the prototype.

2.8. Phase 4: Testing the artefact

The fourth phase of the DDR process was addressed in this section which involved testing the prototype or artefact, which in this study was the teaching plans, against aspects of course design. Testing of the artefact was done in the form of a workshop to gain consensus from the lecturers, teaching courses on the postgraduate diploma for specialist nursing programme, with the focus on the course content's relevance to the nursing speciality fields.

2.8.1. Objective

The objectives for this phase were:

- To test if the artefact meets the requirements of the programme objectives.
- To test if the learning activities of each concept are appropriate for the learning goals.
- To test if the content is appropriate for all specialist nursing fields

2.8.2. Sampling

The research setting offers various postgraduate specialist nursing courses which will be phased out in 2020 and replaced by the newly developed postgraduate diploma of which the course, Scholarship for APN is part of. Lecturers teaching on the current postgraduate courses were invited to participate in the workshop to evaluate the quality of the teaching plans as an internal review process. Currently the research setting has a staff complement of N=8 full time and part time lecturers teaching on the postgraduate courses and therefore the total sample was included for this phase of the study.

The researcher and the research supervisor, however, are part of the postgraduate lecturing staff and therefore, 6 lecturers (n=6) could participate in the workshop. Of the six lecturers 5 (n=5) were able to attend on the day. The one staff member who could not attend was invited to participate in the next round of evaluation (Chapter 7).

The years' experience within a specific nursing specialty of the participants is reflected in table 2.4 and highlights the participants' expertise within nursing and therefore they could make a valuable contribution to ensure the development of a context relevant course.

Table 2.7 Participant experience in nursing speciality

Participant role	Nursing speciality field and highest qualification	Years of teaching experience
Researcher – facilitated the workshop	Nursing Education MSc Nursing Education	5 years
Research supervisor – Moderator and scribe	Nursing Education DCur	10 years
Participant 1	Critical Care and emergency nursing PhD	15 years
Participant 2	Critical Care PhD	7 years
Participant 3	Critical Care and Infection prevention and control MSc	8 years
Participant 4	Occupational Health MSc	20 years
Participant 5	Nursing Education and Midwifery MSc	7 years

2.8.3. Data collection

A workshop approach was used to collect data in this phase of the study and provided an opportunity to involve participants in the decision-making process for consensus. Ørngreen and Levinsen (2017) define the term workshop as: "*an arrangement whereby a group of people learn, acquire new knowledge, perform creative problem-solving, or innovate in relation to a domain-specific issue"*, and de Vos *et al.* (2017) draw attention to the purpose of workshops in a research context, which is to refine decisions from preliminary research to meet the needs of the community, through a collaborative learning process between participants and facilitator. This supports the definition of Ørngreen and Levinsen (2017). A workshop is considered a group discussion method to collect data and emphasises the development cycle of "look", "think" and "act" with the goal of improving or evaluating programmes (de Vos *et al.*, 2017 and Ørngreen & Levinsen, 2017).

Workshop as a qualitative research method has been explored by Ahmed and Asraf (2018) and found to be a useful method to be used in educational research. They state that a workshop has a dual purpose in that it engages the participants to reflect on practices and fulfils a research purpose in producing reliable data. They concur with Ørngreen and Levinsen (2017), that as a research method, workshops have not been described widely and

yet it is a “promising tool” for data collection, in that, it is an organised event with a targeted audience, used to seek people’s opinions, extract knowledge and solve problems collaboratively.

Characteristics of workshops which are known to strengthen the credibility of qualitative research data include communication, honesty in voicing opinions, and mutual respect and diversity. (Ørngreen & Levinsen, 2017 and Ahmed & Asraf, 2018). The workshop method provides an opportunity for prolonged engagement, where the researcher and the participants become part of the research process and are seen as the research instruments. Through this engagement, observations can be made about the interactions between the participants as well as the participants and researcher. Workshops also provide opportunities for active participation and collaboration providing new insights and suggestions for redesign of processes or produces. Using a small group ensures everybody is heard and valued, enhancing the richness of the data (Ahmed & Asraf, 2018). Furthermore, workshops allow for the use of a combination of data collection strategies within the workshop which strengthens the credibility of data collected.

The workshop method differs from other group discussion methods such as a focus group, in that it allows negotiation of meaning through collaborative discussions, where participants can debate issues freely and change their view or opinion based on new information which facilitates knowing about practice without being in practice (de Vos *et al.*, 2017; Ørngreen and Levinsen, 2017 and Ahmed & Asraf, 2018).

Based on the information on workshops as a research method, the researcher planned the workshop including activities to meet the objective for this phase of the study, to gain consensus from the participants around the appropriateness of the teaching plans. The researcher looked at the various activities appropriate for curriculum evaluation that can be used in a workshop as described by van den Akker *et al.* (2010) and Nieveen and Folmer (2013) and identified the “walk through” activity as the activity of choice.

Walk through activity: Light *et al.* (2018) describe the “walk-through” activity as an informal guided process to review high-level documents for consensus. The process is explained by the author of the documents in a step by step approach to reach a common understanding. The walk-through activity aimed to engage the stakeholders to obtain a diverse point of view; provide an opportunity for the author to describe and justify content; identify items not understood as well as incorrect content; gain consensus and discuss solutions.

2.8.3.1. Workshop proceedings:

Time was afforded to read the research information sheet (Appendix B) and sign consent forms (Appendix C) to participate and to be recorded.

As indicated in Chapter 1, the Department of Nursing Education at the research site is moving from a problem-based curriculum towards a concept-based curriculum, and it was essential to ensure that the participants have a mutual understanding of the terminology used in concept-based curriculum development such as conceptual lens, inter-related concepts and exemplars. Further to that the participants had to be clear on the alignment and structuring of the Scholarship for APN course within the postgraduate diploma and the related programme outcomes to enable them to evaluate the course on specific criteria.

The workshop, as illustrated in figure 2.4, was introduced with an icebreaker to highlight the value each participant can add to the evaluation of the quality of the teaching plans. The researcher commenced the workshop with an explanation of the research process thus far: explaining how the information from the scoping review (Chapter 3) was used in the rank order technique and nominal group (Chapter 4) and ended with listing the five (5) identified concepts for which teaching plans were developed. Each concept teaching plan was presented and discussed starting with the first concept, Advanced Practice Nursing, before moving to next concept.

The discussions during the walk through revolved around the appropriateness, meaningfulness and fitness for purpose of each element and learning activity within the teaching plans. After the presentation and unpacking of each teaching plan, the participants were afforded time to complete the evaluation tool (2.7.4) and the process was ended with a final voting activity where participants were instructed to indicate with a coloured card their overall satisfaction with the teaching plan presented.

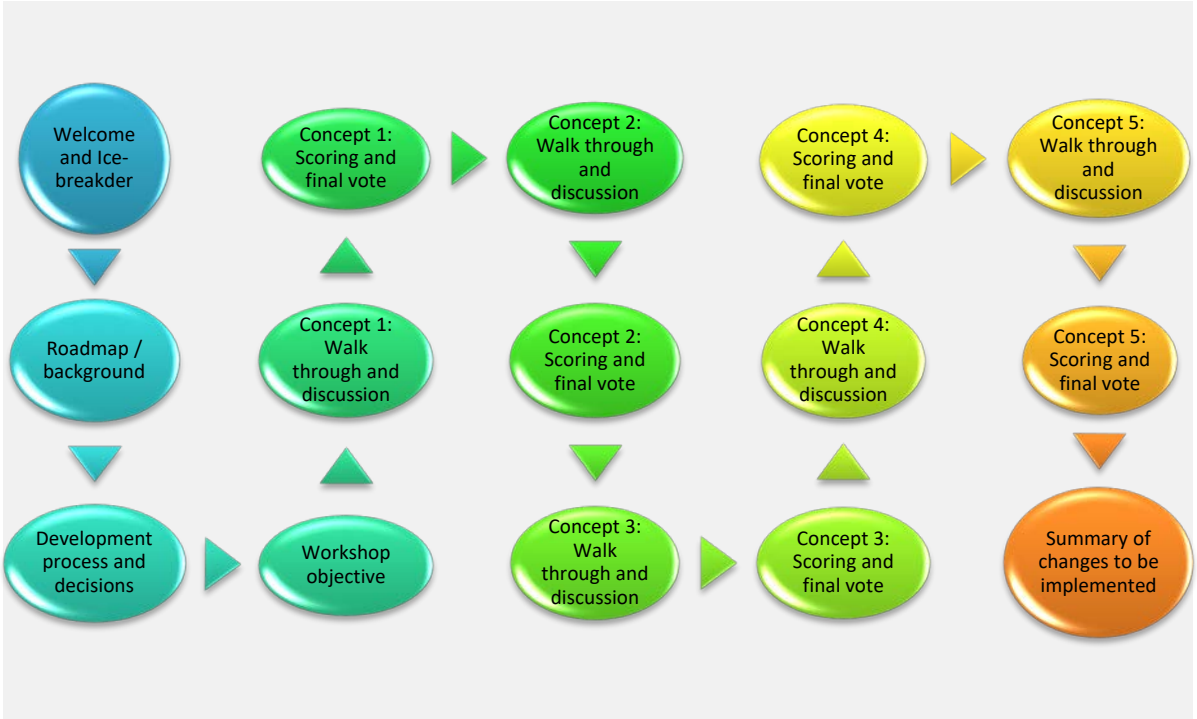

Figure 2.4 Workshop flow

2.8.4. Development of evaluation tool for the workshop participants

To facilitate the evaluation process of the artefact an evaluation tool was developed to capture the participants' judgements on the feasibility, appropriateness and utility of the teaching plans of the Scholarship for APN course. The process for the development of the evaluation tool will be described following de Vos *et al.* (2017) guidelines for questionnaire development. Iwasiw *et al.* (2009); Hussain *et al.* (2011); Tewksbury (2011) and Zhao *et al.* (2017) informed the decisions around the criteria included in the evaluation tool and will be explained in the following sections.

2.8.4.1. Format of Evaluation tool (Questionnaire)

A Questionnaire is a document comprising of items, questions and statements to facilitate gathering of information for analysis (de Vos *et al.*, 2017). De Vos *et al.* (2017) described the objective of a questionnaire as: "obtain facts and opinions about a phenomenon from people who are informed on the particular issue." The characteristics of a questionnaire can be described as an early stage design containing items created from the researcher's efforts and conceptualisations. It is not standardised nor exposed to validation procedures prior to implementation, however, can be validated and refined during the use of the questionnaire in data collection (de Vos *et al.*, 2017).

Various types of questionnaires exist of which the group-administered questionnaire is one of and was chosen for the purpose of this research study. The group-administered questionnaire allows for group discussion prior to completing the questionnaire, which is useful to iron out any misconceptions or misunderstandings by the facilitator.

2.8.4.2. Questionnaire construction

Questionnaires should be accompanied by an information or covering letter (de Vos *et al.*, 2017; Brink *et al.*, 2018) and writing the statements for the questionnaire requires thoughtful construction and de Vos *et al.* (2017) suggest following principles shown in figure 2.5.

Brief and clear
Contain only one thought
Relevant to the purpose
Appropriate language use
Avoid ambiguity, confusion and vagueness
Avoid use of jargon and abbreviations
Categories offer valid range of responses
Avoid emotional statements
Avoid loaded phrases
Don't reflect researcher bias

Figure 2.5 Formulating statements

Constructing the questionnaire (Appendix D) Butcher *et al.* (2019), with their focus on quality assurance, identified three (3) focus areas for consideration when formulating statements and include:

- Value added – the design team should consider what the stakeholders will gain from implementing the curriculum.
- Fitness for purpose – speaks to the appropriateness and relevance of the intended learning content.
- Fitness of purpose – address the alignment, congruence and appropriateness of the course material to programme standards.

For structuring the questionnaire (evaluation tool) the researcher consulted curriculum design elements and adapted elements for evaluation from Iwasiw *et al.* (2009), Hussain *et al.* (2011), Tewksbury (2011) and Zhao *et al.* (2017), which is aimed to test the appropriateness, relevance and usability of the teaching plans of the Scholarship for APN course based on:

- ***Organisation and structure:*** (Fitness of purpose)
  This element looked at the organisation and structuring of the content within the teaching plan specifically on the coherence of the organisation of the content.

- ***Leaning goals:*** (Value added)
  Learning goals were evaluated for clarity indicating what to expect; appropriateness to content and alignment to programme.

- ***Learning activities:*** (Fitness for purpose)
  The focus of the evaluation of the learning activities was on the presentation of the content specifically the relevancy and practicality of the learning activities. Does it reflect conceptual learning through student engagement and encouragement of thinking and reflection.

- ***Ease of use by others:*** (Value added)
  This element for evaluation focuses on the clarity of instructions to users which will be the facilitators of the course.

- ***Assessment:*** (Fitness of purpose)
  The evaluation of the assessment methods requires judgement regarding the clarity and authenticity of the assessment activities.

The lecturers, as an important group of stakeholders, were involved in the evaluation process to ensure the course was developed according to their needs and expectations before implementation. As students have not yet been recruited for the course, it was not possible to include them. Lecturers teaching on postgraduate nursing courses were asked to rate each aspect of the teaching plans presented to them on a scale ranging from:
Does not meet my expectations; Needs improvement/modification; Meets my expectations with minor changes/additions; Exceeds my expectations.

2.8.4.3. Validation phase

The tool used in this phase of the study, evaluation questionnaire (de Vos *et al.*, 2017) was constructed drawing from various authors describing curriculum and course development (Iwasiw *et al.*, 2009; Hussain *et al.,* 2011; Tewksbury, 2011 and Zhao *et al.,* 2017). As stated earlier, a questionnaire does not undergo rigorous standardisation processes (de Vos *et al.*, 2017), however, the researcher did test the tool for face and content validity.

Content validity precedes data collection and determines the representativeness of the topics or elements of the instrument (de Vos *et al.*, 2017 and Brink *et al.*, 2018). De Vos *et al.* (2017) mention that experts review and make judgements to establish content validity and although people check for bias, misinterpretations and completeness it is still subjective. Brink *et al.* (2018) adds to de Vos *et al.* (2017) description with stating the experts evaluate the instrument for its overall suitability and highlight what is missing. Further statistical measurements are not used when assessing the instrument, rather expert review or pilot testing seems more suitable (Brink *et al.*, 2018).

Face validity is described by de Vos *et al.* (2017) and Brink *et al.* (2018) as the least effective and scientific validity type, however, still determine the accuracy, clarity and readability of the instrument.

The evaluation tool was presented to nurse educators involved in curriculum development but not involved in the teaching on postgraduate courses. The aim was to look at the face and content validity of the tool. The feedback received was only minor grammatical changes which was implemented.

2.8.5. Data analysis

The evaluation process applied during the workshop relied on participant consensus regarding the quality of the teaching plans. Data analysis involved in consensus methods reflects the discussion to reach consensus amongst the participants and relies on multiple measurements and taking the average as an indication of agreement or non-agreement (Waggoner *et al.*, 2016). Consensus can be described as the conditions for, and process by which agreed upon points and those not, be considered as a sign of agreement (Cristiano *et al.*, 2020). Consensus methods are formalised procedures reporting on the degree of agreement among experts through discussion, scoring and feedback (Waggoner *et al.*, 2016; Masterson-Algar *et al.*, 2018 and Cristiano *et al.*, 2020).

The workshop proceedings were audio recorded using an application *audionote* and transcribed verbatim for reporting. The discussion points around the presentation of the teaching plans are presented in Chapter 6. The discussion led into the scoring or evaluation of the teaching plans using the evaluation tool. The data from the evaluation tool used as a scoring rubric was captured on an Excel spreadsheet and basic descriptive statistics were applied to describe the outcome of each teaching plan. A number value was allocated for each criterion:

1 = Does not meet my expectations;

2 = Needs improvement/modification;

3 = Meets my expectations with minor changes or additions and

4 = Exceeds my expectations.

A score averaging 3 was considered to be sufficient and would represent a good quality teaching plan.

The final aspect of measuring the consensus and satisfaction was accomplished with a voting exercise (described in Chapter 6).

2.8.6. Final approval

The final approval involved all the changes indicated during the workshop to be affected on the teaching plans were done and highlighted in a different colour together with a list of changes, which were emailed to the participants for final approval. A checklist (Appendix E) was attached for the participant to "sign off" on the changes and be returned as proof of approval.

2.9. Phase 5: Course validation

The fifth phase of the DDR process entailed the validation of the teaching plans through an expert appraisal. Nursing and educational experts reviewed the teaching plans to validate the quality thereof using a checklist.

Course validation is a process where course documents are scrutinised before implementation to determine the appropriateness of the course, the suitability of the course and if the course offers the best opportunity for the students to meet the learning outcomes. It therefore provides an opportunity to revise and refine the course elements to meet set quality standards (Hussain *et al.*, 2011; Weiner *et al.*, 2017 and Khan *et al.*, 2019).

Zhao *et al.* (2017) indicated the purpose of curriculum evaluation and validation is to ensure the main aspects of the curriculum or proposed course reflect current up-to-date practices; that they engage students providing multiple opportunities to learn; that teaching strategies are inclusive, pitched at the appropriate level and are of high quality and finally that they meet the statutory and academic requirements.

Acceptability, appropriateness and feasibility (Weiner *et al.*, 2017) are leading indicators and although semantically similar and inter-related, provide the reviewer with an opportunity to

make judgements on the fitness for purpose of the course elements. Weiner *et al.* (2017) described judgements about criteria and indicators are made from a personal, technical and practical perspective. Acceptability, a personal based criterion, determines the extent the reviewer found the course elements agreeable with their own understanding and view of what is expected; Appropriateness, determines the level of consistency with standards and is seen as a technical criterion; Feasibility, represents the practical domain in that judgements are based on the usability of the course elements.

2.9.1. Objective

The objective for this phase was to evaluate and validate the quality of the scholarship for APN course against set criteria.

2.9.2. Sampling

An expert group (n=7) consisting of educational experts within the healthcare environment and nursing specialists was identified using purposive sampling method to appraise and evaluate the course. The criteria considered for approaching an expert were that they should:

- Be in the possession of an education qualification i.e. a degree or diploma in nursing education, or health science education.
- Have experience of curriculum development.

Table 2.8 provide demographic information on the educational experts whom evaluated the course.

Table 2.8 Demographic information of experts

Expert	Area of Expertise
Expert 1	Health Sciences Education Consultant (Gauteng)
Expert 2	Therapeutic Sciences Online learning consultant (Gauteng)
Expert 3	Private Healthcare (Gauteng)
Expert 4	Senior Lecturer Nursing Education (Free State)
Expert 5	Senior Lecturer Nursing Education (Northwest)
Expert 6	Senior Lecturer – Interprofessional Education (Gauteng)
Expert 7	Public Healthcare (Gauteng)

2.9.3. Data collection

The revised teaching plans together with an information sheet and evaluation tool (Appendix F) were emailed to the experts to conduct the validation. The expert group took on the role of an interpreter to establish the viability of the course, from an analytical stance, providing additional information for course improvement before implementation (Khan *et al.,* 2019).

2.9.3.1. Evaluation tool

The evaluation tool was constructed using information from various authors (Bowen, 2017; Weiner *et al.*, 2017; Zhao *et al.*, 2017 and Khan *et al.*, 2019) and included elements:

- Organisation and structure of the teaching plan (4 criteria)
- Teaching plan overview and information (4 criteria)
- Learning content (3 criteria)
- Learning activities (4 criteria)
- Learning evaluation and or assessment (3 criteria)
- Teaching plan effect (2 criteria)

The indicators for judging the validity and quality of the course elements included acceptability; appropriateness and feasibility. The three (3) indicators have similar meanings and are inter-related and further dependent on the reviewers' connotation of the indicator, which might impact the final outcome. Due to the inter-relatedness of the indicators the course elements should meet more than one indicator to be valid, i.e. if a reviewer find an element to be acceptable and appropriate but not feasible the element would be valid, however, the reason for it not being feasible should be noted and addressed.

2.9.4. Data analysis

The data was captured on an Excel spreadsheet and analysed for consistency in the ratings. If an element met at least two (2) out of the three (3) criteria it was considered to be valid. However, the researcher did report on the concerns from the expert group on all elements not viewed as appropriate, acceptable or feasible.

In Chapter 7, the results are discussed around the validation outcome of the teaching plans for the Scholarship for Advanced Practice Nursing course.

2.10. Rigor of the Study

Design and development as a research design complicated the issue of validity, reliability and trustworthiness, due to its pragmatic nature. Cole *et al.* (2005) described rigor, as it applies to DDR, as rooted in pragmatism where the truth lies in utility related to two (2) basic activities building and evaluating. The researcher used the principles of Guba and Lincoln namely credibility, transferability, dependability and confirmability as explained by Shenton (2004) to ensure rigor was applied to the study.

2.10.1. Credibility

Shenton (2004) explained credibility as the faithful description of data that can be believed by and seen as appropriate by the reader in similar circumstances. To promote confidence in the reader about the accuracy of data recording, the researcher should immerse oneself in the data and engage reflexively with the research process (Shenton, 2004). Noble and Smith (2015) refer to credibility as the truth value and argued the researcher should acknowledge that multiple realities exist and should therefore outline personal experiences and viewpoints from the onset, identify methodological bias and confirm the data presented represents the participants view accurately.

Steps followed to ensure credibility in all phases of the study included:

- The researcher used established research methods in all the phases with a clear record keeping trail to demonstrate the decision-making processes; provided a detailed description of the actual situation and context in each phase.

- Engaging with consensus methods throughout the study allowed for multiple and different perspectives being reflected in the study and this, together with peer scrutiny and frequent debriefing sessions with the study supervisor reduced researcher bias.

- Triangulation of data sources was achieved using multiple types of data such as the variety of perspectives provided by different groups contributing to a more stable view of reality. Another data source used was seeking support from literate to relate findings to existing body of knowledge.

- The accuracy of the data was maintained by member checking, participants were afforded time to validate their contributions and emerging ideas and themes were verified with the study supervisor.

- The researcher engaged with the research process on all levels, being reflective and responsive and able to adapt to deliver a relevant course that is valued by the university as useful.

2.10.2. Transferability

Transferability is concern with how fitting the results are to different contexts (El Hussein *et al.*, 2015 and Shenton, 2004). In qualitative research transferability is difficult to achieve as the researcher knows the study context, however, can't make inferences on behalf of the reader. Providing sufficient contextual information might help the reader to transfer information into other settings.

Burchett *et al.* (2013) suggested that readers when judging transferability of a study base their decisions on factors such as congruence, ease and effectiveness of implementing an intervention and research specific factors such as the setting and methods used. Noble and Smith (2015), therefore, stated for qualitative studies it is more appropriate to report on applicability than transferability.

Transferability was difficult to achieve, as this study was specific to the context of one university in South Africa, however, it provided base-line findings for further research projects. Each methodological process was described and highlighted the boundaries of the study, which will enable the reader to make decisions on the applicability in their own context.

2.10.3. Dependability

Shenton (2004) explains dependability in terms of documenting and auditing of the research process followed accounting for changing conditions. Providing an audit trail on what was discovered and how it was discovered. This thesis detailed the research design, how it was planned and executed. It provides operational detail on data collection and in the last chapter a reflective appraisal on the utility of the project.

2.10.4. Confirmability

Confirmability questions the objectivity of the researcher and how the researcher accounts for bias. (Shenton, 2004). El Hussein *et al.* (2015) refers to confirmability as auditability, stating with an audit trail detailing the decisions around methods used, sampling and analysis will assist with ensuring an accurate account of the project and limit researcher preferences or bias.

Confirmability was maintained in this study by providing, in the subsequent chapters, explicit reasoning on methods, showing how findings lead to recommendations, triangulation of information sources and identifying limitations.

2.11. Ethical considerations

The ethical considerations applied to this study drawn upon two ethical frameworks. The first was that of Seedhouse and Flinders (1998) as described by Stutchbury and Fox (2009) as it relates to educational research which was embedded in the framework of Emanuel *et al.* (2008) as described by Tsoka-Gwegweni *et al.* (2014). Stutchbury and Fox (2009) described four (4) areas addressed in the framework namely "*ecological*" or the external issues related to the research; "*consequential*" highlighting the consequences of actions; "*deontological*" describing how the research was done and "*relational*" describing the core interpersonal issues related to the research, whereas the Emanuel *et al.* (2008) framework, as described by Tsoka-Gwegweni *et al.* (2014), includes nine (9) areas and the application to this study is described below:

i) *Collaborative partnerships* – requires community representatives to form part of the research process. The community in this research study was the specialist nurses, educators and faculty teaching on the specialist nursing programmes. The researcher being part of this community reflected on the relationships amongst the participants and co-researchers and ensured active participation through the choice of research methods which rely on collaboration that will represent different viewpoints within the local context.

ii) *Social value* – speaks to the benefits of participants without wastage of resources. The research methods employed in the study enable the documenting of everyone's perspective and during the collaboration participants and researchers learn from one another, with one another about the different specialities. The research methods used also drawn on the inclusion of best practices in the product development to ensure it is feasible for implementation. The researcher was cognisant of the time demand on participants and choices and decisions on methods reflect this aspect.

iii) *Scientific validity* – requires the use of valid methods relevant to the research problem and objectives. Although this research study does not address a clinical health problem, scientific validity was maintained through applying principles of rigor and trustworthiness in each phase of the study. Each choice can be justified with the contribution it makes to research and the department.

iv) *Fair participant selection* depends on the fair selection of participants. The decision to use purposive sampling methods in all the phases was based on the methods and objectives of the research. The information gained from the participants have a direct impact on the relevance of the study to practice and to the local context.

v) *Favourable risk-benefit ratio* speaks to minimize the risk and maximize the benefits for the participants, researcher, context and society. The researcher considered each method carefully to ensure the best outcome for the participants, that it is relevant to the department and represents high quality standards based on current practices.

vi) *Independent ethical review* is governed by the Human Research Ethics Committee of the university where approval was obtained from.

vii) *Informed consent* included aspects of honesty and candour, fairness, reciprocity and truth. The researcher applied these aspects from the onset of the research being open with participants and co-researchers about their participation, what is expected from them and what they can expect from being part of the study. The implications were discussed, and changes were communicated timeously to be mutual beneficial.

viii) *Ongoing respect for participants* including principles of confidentiality, anonymity and data management. The researcher engaged with the participants in a respectful manner by ensuring confidentiality and anonymity throughout the research process. Discussions were recorded and active participation from all participants were maintained by ensuring each person's contribution was valued and respected. Transcriptions were shared with participants for member checking and completeness and names were replaced with codes. The data was kept confidential in a password protected computer accessed only by the researcher and supervisor. Participants were made aware of how the results and findings will be disseminated, journal articles and thesis, at the onset of the process. Finally, the researcher and the supervisor acted as moderators of the process, asking critical questions and built understanding, and ensured that the process added value and the best outcome was achieved.

Chapter 3. Scoping Review (Phase 1)

3.1. Introduction

This chapter provides detail of a scoping review that was conducted as the first phase of the development of a course in scholarship in APN. South Africa has been producing nurses to work in speciality areas such as Intensive Care, Emergency and Child Health. The SANC has, in its regulations relating to the programme in Clinical Nursing Science (Regulation: R212), only made passing reference to competencies other than clinical competencies.

While a course known as 'Professional Nursing Dynamics' was a requirement for this the Clinical Nursing Sciences programme (which will no longer be offered after December 2019), no detail was given as to the expected course outcomes and nursing education institutions were left to decide what content to place in this course. Now, with the introduction of the new speciality courses at postgraduate diploma level, little has changed with only two outcomes being made explicit by the SANC for the non-clinical aspect of the course (SANC, 2014). One of these outcomes deals with 'practice within ethical-legal parameters' and the second dealing with 'evidence-based practice'.

It was therefore important, prior to the development of a curriculum to understand what an APN is and the role they play within the healthcare system.

3.2. Aim

The aim of the scoping review was to identify, the roles of the Advanced Practice Nurse as demonstrated in the international literature.

3.3. Review question

The scoping review question was: "What are the roles of an Advanced Practice Nurse?"

3.4. Search and inclusion

The initial literature search was conducted in February 2017 and evidence was sourced from searching electronic databases and reference lists. Databases used to conduct the

search were: CINAHL, MEDLINE, ProQuest and Science Direct. Table 3.1 illustrates the settings and inclusion criteria applied to each database search to ensure consistency.

Table 3.3.1 Criteria for literature search

Settings for Database	**Keywords**	**Period**	**Inclusion criteria**
Advanced search	Advanced practice nurse	January 2012 - February 2017 (selected literature published 5 years or less from the time of the review)	Full text articles
Title and Abstract	Roles		English language

According to the procedures for a scoping review by Aveyard *et al.*, 2016, decisions for the search process were set and the outcomes of the search are illustrated in figure 3.1. below. The identification phase used the two key words and searched for English language articles, producing one thousand and fifty-three (1053) articles. The search excluded articles unavailable in full text and articles which were not available to the researcher due to limitations of institutional journal subscriptions. The screening phase firstly removed duplicate articles. The remaining articles (n=985) were screened by title and abstract for mention of "advanced practice nurses" and meeting this criterion were included in the next phase. The eligibility phase scanned the full text articles for relevance and the article was included if it met the objective "to identify roles of an advanced practice nurse". The number of articles included for the review, which met the search criteria was twenty-eight (n=28). The reference lists of the included articles provided another source of evidence. Articles from the reference lists discussing the development of the advanced practice nurse role were accessed, and although they fell outside the initial search inclusion criteria due to the date range settings, five (5) additional articles were included in the review using the same selection and eligibility criteria as they are foundational works cited in most of the current literature. The final number of articles that were reviewed was thirty-three (n=33).

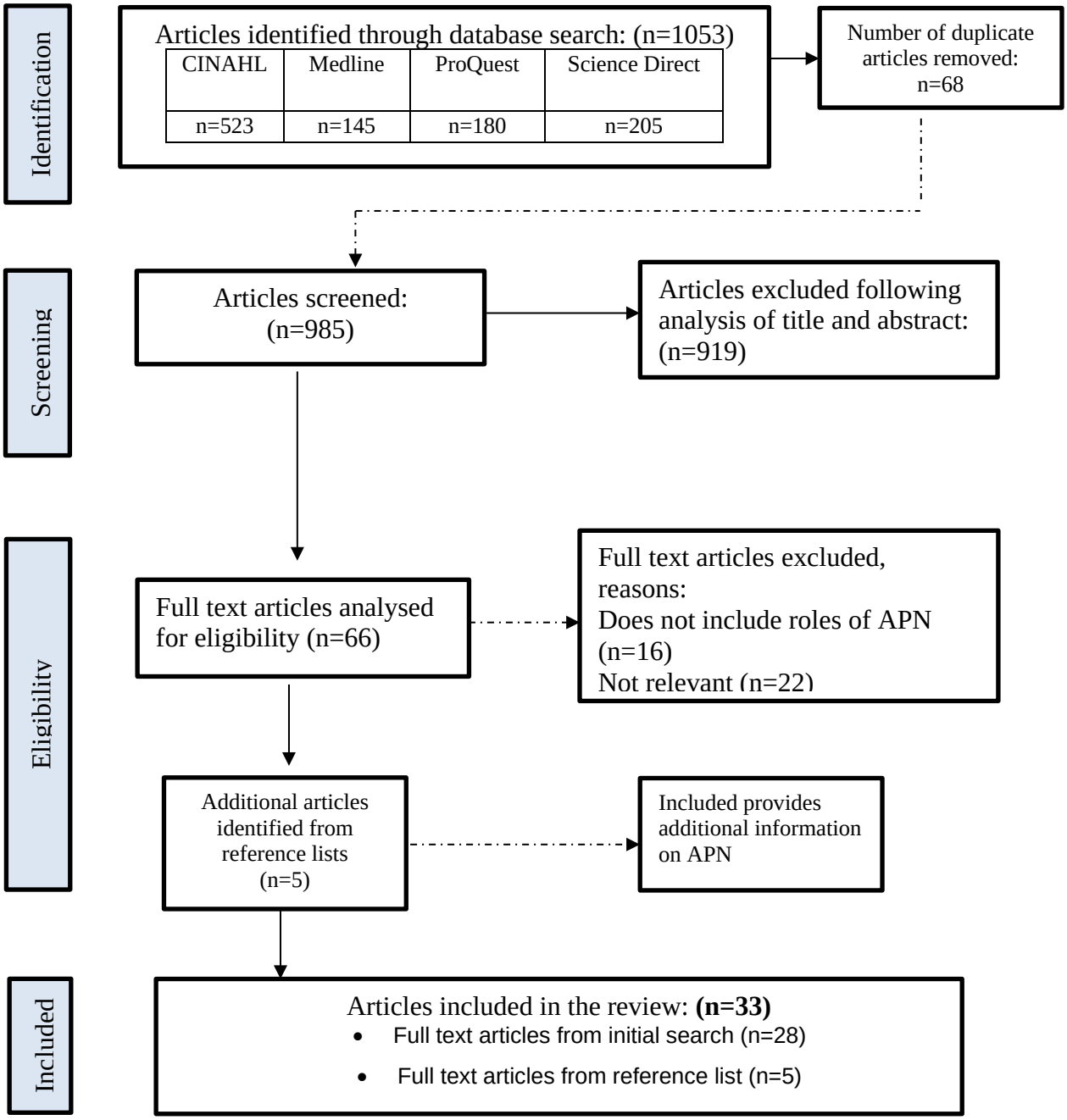

Figure 3.1 Prisma Diagram

The thirty-three articles included in the final review illustrate the historical development of advanced practice nursing internationally. An analysis of the descriptive aspects of the articles was done, looking at the productivity and methodological characteristics of the articles (Zuriguel Perez *et al.*, 2015).

3.4.1. Productivity characteristics

Table 3.2 shows the productivity characteristics which included the number of articles per year as well as the country of origin. Researchers from the United Kingdom (UK) and the United States of America (USA) were at the forefront of the development of the APN with publications as early as 1996 (Woods, 1996). Advanced Practice Nursing (APN) can be seen as a subject of interest with articles published around the role of the APN remaining fairly constant around five (5) articles per year, with the exception of 2012 when nine (9) articles were published. In total ten (10) countries contributed to the production of articles that were included in the review. The majority of articles in the review period were produced in Australia (8 articles), with seven (7) articles from the USA and Ireland following closely with six (6) articles.

Table 3.3.2 Productivity characteristics: year of publication and country of origin

Year of publication	**Number of articles**	**Country of origin**	**Number of articles**	**Country of origin**	**Number of articles**
1996-2011	5				
2012	9	Australia (2012 – 2015)	8	Netherlands (2013; 2015)	2
2013	6	Ireland (2012 – 2016)	6	Switzerland (2016)	1
2014	3	USA (2000 – 2016)	7	Spain (2014)	1
2015	4	England/UK (1996; 2012)	3	Finland (2012)	1
2016	6	Canada (2004; 2014)	3	Sweden (2016)	1

The global perspective of the APN is that there is role confusion within the nursing profession, influencing the development, implementation and integration of the APN into the architecture of health care. Initial research focused on defining the roles of the APN and practice domains (table 3.3). The attributes of the APN and the practice tasks associated with the roles were clarified by further research. Recently the focus of study has shifted to the practice outcome validation of the APN, integration of the APN into clinical practice and the education of the APN compared to the generalist nurse.
Researchers from three countries played a major role in the introduction and early development of the APN role, namely: England, where researchers looked at the

components and characteristics of APN titles and roles (Woods, 1996); the USA, where researchers explored APN roles and differentiated these within the practice domains (Mick and Ackerman., 2000); and Canada, where researchers addressed issues influencing the introduction of APN in practice and establishing the role of the APN (Bryant-Lukosius & DiCenso, 2004). From the work done by researchers in these countries, frameworks for APN were developed, that formed the basis for further research.

Table 3.3 Aims of the studies in the scoping review

Aim of study	**Number of articles**
Investigate nature of roles, activities and responsibilities	3
Comparing roles and responsibilities	4
Describe the process of role development	3
Address the gap to support the development of APN	2
Examine the impact of APN in patient experiences	3
Examine the praxis of APN	4
Explore perceptions of APN	3
Identify leadership competencies of APN	3
Explore how APN implement change	1

Researchers from Finland, Australia and The Netherlands conducted literature reviews to understand the importance of role definitions and role clarity, as well as the various APN domains (Jokiniemi *et al.*, 2012; Lowe et al., 2012; Ter Maten-Speksnijder *et al.*, 2013). Baldwin *et al.* (2012); Begley *et al.* (2012); Chang *et al.* (2012) and Gardner *et al.* (2012) are researchers from Australia, Ireland and the UK respectively, who, during 2012, steered their research focus towards comparing APN role activities and responsibilities to patient outcomes. They were particularly interested in establishing how the APN role differs from other nursing profiles.

During 2013, the research focus from Australia and Ireland shifted towards understanding the praxis of APN. They looked specifically at the time spent on individual role activities and compared specialist services to patient outcomes. This led to the development of individualised outcome indicators for specific roles, such as leader and consultant (Comiskey *et al.*, 2013; Elliot *et al.*, 2013; Fry *et al.*, 2013; Roche *et al.*, 2013 and Wickham, 2013).

From 2014 to 2016 global research shifted towards the practical integration of the APN. They worked to validate practice outcomes established in 2004 framework (The Strong Model of APN) (Mick & Ackerman, 2000; Bryant-Lukosius & DiCenso, 2004) according

to the APN's perception of accountability towards the outcome, importance of the outcome to practice and level of monitoring of the outcome.

The enablers and barriers, influencing the development of each role, were identified in early research and were somewhat similar across practice contexts and countries. Recent studies focused on how these enablers and barriers were managed in the process of role transitioning from the general practice nurse to the APN. Investigations considered the support required for the implementation of the APN roles to further ensure integration of the APN into the architecture of health care (McKenna *et al.*, 2015).

Understanding the APN role framework and the integration and outcomes of the APN provides a basis for crafting the training of the APN in preparation for practice. The first nurses to take on the roles of the APN were experienced practitioners, not formally trained, but appointed on merit. The degree of formal training of the APN varied between country and context. While traditional teaching methods prevail, the training methods for development of the APN professional responsibilities suggested using interprofessional collaborative education methods, advanced clinical reasoning and development of autonomy. The capability framework was identified as having better learning outcomes than traditional training methods (O'Connell *et al.*, 2014 and Sastre-Fullana *et al.*, 2014; Farrell *et al.*, 2015; Gosselin *et al.*, 2015; McKenna *et al.*, 2015; Ter Maten-Speksnijder *et al.*, 2015; Bryan-Lukosius *et al.*, 2016; Coyne *et al.*, 2016; Defenbaugh *et al.*, 2016 and Fulton *et al.*, 2016). This provides the platform for the development of 21st Century Learning methods into the preparation of the APN for practice.

3.4.2. Methodological characteristics

The papers included in this scoping review were on the lower levels of evidence when considering the seven levels of evidence for evidence-based practice. Level VII is the lowest level and includes expert opinion, discussion papers, and committee reports. Within this review 6 papers were on level VII (table 3.4). Level VI considers single descriptive studies and qualitative studies. Twelve (12) papers in this review were on level VI. Level V of evidence draws on systematic reviews and literature reviews of level V to VII studies without meta-analysis. This scoping review highlights that the dominant research method was the level V systematic reviews of APN framework (7). Level IV evidence includes observational studies, eight (8) papers used a study methodology in this level. There were no studies on

the APN framework that contributed to levels I to III of the levels of evidence as defined by Ackley *et al.* (2008). As 'roles' are theoretical constructs they do not lend themselves to random control trials which could explain the lack of high level evidence on the subject. In the light of the lack of strong practice evidence might influence our understanding of APN and how we prepare the APN for practice readiness. The implementation of an APN curriculum in South Africa will provide the opportunity to evaluate the impact of the integration of the APN role within the South African health care system at higher levels of evidence.

Table 3.3.3 Level of evidence

Level of Evidence	Research design and methodology	Number of articles
Level I – Meta-analysis Systematic reviews with meta-analysis of relevant random control trials		0
Level II – Experimental designs Random control trials		0
Level III – Quasi-experimental designs Pre-test – Post-test designs, well controlled designs without randomization		0
Level IV – Observational: Analytic designs Systematic review of comparable cohort studies; Case-controlled studies; cohort studies; observational studies without control group	Case studies Cohort study Secondary analysis of multi case data set	5 2 1
Level V – Reviews Systematic review of descriptive studies	Literature reviews without meta-analysis	7
Level VI - Observational: Descriptive studies Cross-sectional studies; case studies	Qualitative studies (surveys) Qualitative studies Cross sectional studies Quantitative studies	4 5 2 1
Level VII – Expert opinion and Bench research Discussion papers; expert opinion papers;	Discussion papers Expert review	5 1

Level of evidence table derived from: Ackley et al. (2008)

3.4.3. Charting data

Charting data refers to extracting relevant data from the articles onto a data matrix. A data extraction tool was developed to capture information from the primary sources and included the study characteristics relevant to the review (Pham *et al.*, 2013).

Data was extracted using the guidelines of Whittemore and Knafl (2005), and included the authors, year of study, country of origin, aim, sample, setting, research design/method and findings (key terms related to APN). Whittemore and Knafl (2005) suggest putting in a major-findings column in the data extraction tool. As this study required data extraction of the roles of advanced practice nurses, the major findings column was replaced by one

entitled ‘Identified key terms’ which forms part of the summative analysis as explained in chapter 2. A summary of the information extracted can be seen in table 3.5.

Table 3.3.4 Data extracted (data matrix)

Authors Year of study Country	Aim | Sample | Setting	Research design / Method	Key terms in papers related to APN	
Baldwin *et al.* **2012** **Australia**	• Investigate the nature of CNC roles, activities and responsibilities • 56 CNCs • Tertiary level public hospital in Australia	Descriptive exploratory cohort study Online survey, and semi-structured interviews	Advice to family, MDT, Administrative and management Education Research	Quality improvement Collaboration (IP) Decision making Specialist knowledge
Begley *et al.* **2012** **Ireland**	• Comparing roles, responsibilities and outcomes of different Advanced Nurse Practitioners in Ireland • 23 ANPs at 13 sites in Ireland 154 Service users • Ireland	Mixed-method case-study design. Interviews and Observation Surveys	Case management Autonomous Clinical decision making Teaching / education Advise Communication Holistic care Role model Develop guidelines Expert practitioner	Audits Mentoring Coordinate MDT Research Evidence Based Practice Independent practitioner Leadership Consultant Advocacy
Bryant-Lukosius *et al.* **2004** **Canada**	Discuss issues influencing the introduction of APN roles	Discussion paper	Education Research Organizational leadership Professional development Develop and evaluate interventions	Collaboration Change agent Communication
Bryant-Lukosius & DiCenso **2004** **Canada**	Describe a participatory, evidence-based, patient-focused process for advanced practice nursing role development	Discussion paper	Education Research Professional development Leadership Accountability Autonomy	Collaboration Communication Safety Efficacy Responsibility
Bryant-Lukosius *et al.* **2016** **Switzerland**	• Address the gap to support the development of advanced practice nursing in Switzerland • 15 Stakeholders from Germany, Canada, Switzerland and US • Switzerland	Participatory research Teleconferences, workshops and meetings	Ethical decision making Guidance and coaching Consultation Evidence based practice Leadership	Collaboration Research Education Quality
Chang *et al.* **2012**	• To evaluate the construct validity of the modified advanced practice role delineation	Postal survey	Collaboration Promote role	Professional leadership Support of systems

Australia	tool to be used as a workforce planning framework • 658 State government employed registered nurses in • Queensland Australia		Research Leadership	Education Publication
Comiskey *et al.* 2013 Ireland	• To identify key patient outcomes and to compare these outcomes across services that employed clinical specialists. • 46 Services – 23 post holding and 23 non-post holding • Ireland	Cross-sectional study design with a comparison group	Professional leadership Clinical leadership Governance Research Expert Decision making	
Coyne *et al.* 2016 Ireland	• Explore how clinical aspects differ between post holder and non-post holder providers from the perspectives of service users • 23 Post holders and 23 non-post holders • 13 sites in Ireland	Case study approach Observations and Interviews	Advocate Holistic Care Decision making Advisor Evidence based practice Policy development Training Leadership Autonomy	Communication Safety Case management Service provision Coordination (MDT) Teamwork Independent Support
Defenbaugh *et al.* 2016 USA	• Examine the impact of standardized patient experiences in Advanced practice nurse education • 15 Advanced practice nurse students • Morsani College of Medicine	Qualitative research Interviews using an interview guide	Therapeutic communication Diagnostic reasoning Self-awareness Communication	Clinical decision making Problem solving Critical thinking Collaboration
Elliot *et al.* 2012 Ireland	• Identify how leadership is enacted by advanced practitioners in nursing • 23 CP/AP and 28 health service providers • Ireland	Evaluation research using case study methodology Observations (structured observation tool), interviews (interview guide)	Guides and coordinate MDT Practice development Initiate change Implement guidelines Develop care services	Education Mentor and coaches Role model Decision making Professional development
Elliot *et al.* 2013 Ireland	• To develop leadership outcome indicators appropriate for advanced practice nurses • 23 case studies • 13 sites in Ireland	Secondary analysis of a multiple case study data set	Leadership Capacity building (MDT) Training and mentoring Research Quality assurance Responsibility	Advancing practice Motivation Decision making Referral Integration of practices Research application

Farrell *et al.* 2015 USA	Demonstrate the need to incorporate IPE in the socialization models used in advanced practice nursing programmes.	Discussion paper	Accountability Autonomy Advocacy Ethical behaviour Safety Quality Collaboration Decision making Communication	Leadership Negotiation Conflict management Independent Coordination Responsibility Judgment Problem solving
Fry *et al.* 2013 Australia	• To examine what the CIN does – the praxis of being a CIN in observable everyday life. • 16 emergency department nurses • 3 ER in New South Wales	Qualitative exploratory study	Therapeutic relationship Communication Conflict management Challenge change Responsibility	Teamwork Mentor Teaching Role model
Fulton *et al.* 2016 USA	• Explore practicing CNSs' perceptions of the validity of the core CNS practice outcomes • 347 registered CNS practitioners • USA	Cross-sectional descriptive survey design Using Web-based survey software	Accountable Collaboration Evidence based practice Education Quality	Research Decision making Problem solving Management of resources
Gardner *et al.* 2012 Australia	• To test a model that delineates advance practice nursing roles from other nursing profiles • 660 public funded health service providers • Queensland Australia	A state wide survey	Direct comprehensive care Support of systems Education Research Publication Professional leadership Communication Documentation	Coordinate MDT Collaborate Mentor Role model Advocate Autonomy Consultant Ethical decision making
Gosselin *et al.* 2015 USA	• To explore how advance practice nurses, implement practice change in academic medical centres • Published peer review literature, web-based resources and professional society materials	Literature review	Change management Evidence based practice (innovation) Support Mentor Consultation Quality / cost effective Independent Collaboration	Autonomy Leadership Inter professional collaboration Education Communication Develop standards safety
Gregorowski *et al.* 2012 UK	• To explore the development of the nurse consultant role • 5 Nurse consultants	Action research Face to face meetings observations	Clinician Independent practitioner Clinical decision making Communication	Consultancy Accountability Managing practice Leadership

	• Tertiary referral hospital in the UK		Advocate Analyse critical incidents Responsibility for practice Research Promote best practice Part of MDT EBP	Advice Support Coordinate Teaching Collaboration Expert practice
Honig *et al.* **2011** **USA**	• To test a survey aiming to track roles and competencies of doctorally prepared nurse clinicians • 25 faculty members • Columbia university school of nursing	Pilot study Survey	Communication Responsibility Decision making Ethical principles	Consultation Accountability Advocacy Coordinate care
Jangland *et al.* **2016** **Sweden**	• Explore the participants experience their role transition and what competencies they used in the team. • 10 newly qualified Nurse practitioners • 5 different hospitals (7 surgical units)	Qualitative Face to face interviews	Holistic care Clinical reasoning EBP Resource Ethical decision making Coaching	Cooperation Case management Research Leadership Change agent Consultation
Jokiniemi *et al.* **2012** **Finland**	• Describe prerequisites, role domains, challenges affecting role implementation and outcomes of advance practice nursing roles in 3 countries (USA, UK and Aus). Find out if roles are consistent in all three and whether an international consensus regarding a definition of the AP is possible. • 42 articles reviewed	Literature review 19 articles from UK 12 articles from USA 11 articles from AUS	Expert holistic clinical care Clinical reasoning Care coordination Role modelling Advocate Facilitate developments Challenge practice Quality assessment EBP Education Resource	Problem solving Consult Management Leadership Change agent Support Practice development Administration Advise Research
Kilpatrick *et al.* **2014** **Canada**	• To summarize results of empirical and theoretical literature related to APN roles, teams, and perceptions of team effectiveness. • 6390 titles reviewed	Extensive literature review of organizational and health care literature	Team work Collaboration Communication Accountability Motivate Policy development	Coordination Decision making Problem solving Cohesion Delegation Conflict management
Lowe *et al.* **2012** **Australia**	• Discuss the importance of providing meaningful advanced practice nursing role definition and clarity	Literature review	Holistic care Health promotion Education Advice	Autonomy Governance Clinical judgment Collaboration

	• 1995-2010 on CINAHL and Medline		Complex decision making	Consultancy
McKenna *et al.* 2015 Australia	• Explore the barriers and enablers influencing the development of advanced nursing roles • 23 participants – stakeholders • Australia	Three round modified e-survey Delphi study Semi structured interviews were conducted	Professional development Support Practice Management Autonomy	Decision making Coordinate EBP
Mick and Ackerman. 2000 USA	• To differentiate between the roles of clinical nurse specialists and acute care nurse practitioners • 18 subjects • A major academic medical centre and its affiliated hospitals in USA	Descriptive exploratory pilot study	Direct comprehensive care Support of systems Education Research Professional leadership	Publication Quality improvement Advocacy Consulting Change agent
O'Connell *et al.* 2014 Australia	• To present a discussion on the application of a capability framework for advanced practice nursing standards/competencies • Data bases: CINAHL, Medline, ERIC, EBSCOhost	Systematic literature search	Critical thinking Self efficacy Problem solving Analytical Generate new knowledge	Decision making Holistic care Collaboration Resource for all
Roche *et al.* 2013 Australia	• To evaluate the roles, activities and responsibilities of the CNC role within a particular hospital • 56 CNC's • A tertiary referral hospital	Descriptive exploratory cohort study Mixed method data collection – online survey; semi-structured interviews.	Consultant Education Management Leadership	Research Change agent Responsibility Innovation
Sastre-Fullana *et al.* 2014 Spain	• Describes a literature review that identified common traits in advanced practice nursing that are specific to competency development worldwide • 119 journal articles 97 documents from grey literature	Literature review and a directed search of institutional websites	Change management Autonomy Research Leadership Clinical judgement Mentoring / coaching Collaboration Ethical and legal practice Education and teaching	Safety Consulting Care management EBP Health promotion Communication Cultural competencies Advocacy Quality management
Ter Maten-Speksnijder *et al.* 2015 The Netherlands	• Explore nurse practitioner students' perceptions of their professional responsibility for patient care • 46 nurse practitioner students enrolled in a masters programme	Qualitative interpretative design Reflective case studies	Problem solving Responsibility Collaboration Support Interpersonal skills	EBP Independent Motivate Mentor

	• A university in The Netherlands			
Ter Maten-Speksnijder *et al.* 2013 The Netherlands	• To explore the debate on the development of the nurse practitioner profession in the Netherlands • Review 14 policy documents 35 opinion papers 363 opinion articles medical and 24 opinion articles nursing (1995 – 2012)	Literature review	Care coordination Communication Accessible Quality improvement Autonomy Management	Decision making Clinical judgment Capable Responsible Advocate Change agent
Westrick *et al.* 2016 USA	To discuss issues in the nursing literature relating to medical error disclosure	Discussion paper	Safety Responsibility Communication Ethical liability Accountable Support	Quality Change agent Develop policies Training Risk management EBP
Wickham 2013 Ireland	• Explore the CNS and clinical midwife specialist roles in practice and time spent on individual role activity • 744 CNS and CMS • Ireland	Quantitative Self-administered questionnaire	Flexibility Creativity Listening Communication Decision making Negotiating Organizer Collaborator and liaison Role model Educator	Develop policies & guidelines Consultant Advisor Resource Research Change agent / innovator Management and administrator
Williamson *et al.* 2012 UK	• To examine the role of ward-based ANP and their impact on patient care and nursing practice • 5 APN • A large teaching hospital in the North West of England	Ethnographic approach using Observation and interviews	Communication Role model Responsibility Consultant Specialist knowledge Clinical judgment	Resource Formal teaching Mentorship Political awareness Leadership
Woods 1996 England	• To discuss advanced role nomenclature and components and characteristics of the various advance practitioner titles • England	Discussion paper	Quality improvement Collaboration Autonomous	Decision making Accountability Holistic Care

3.4.4. Collating, summarising, reporting

Hsieh and Shannon (2005) describe 3 approaches to qualitative content analysis of which summative content analysis was applied in this review. Summative content analysis commences with quantifying words and phrases to explore usage in context, followed by a latent content analysis discovering the underlying meaning of the words.

3.4.4.1. Stage 1: Quantitative analysis

The key terms identified during data extraction (table 3.5), were tallied and clustered into to 3 categories as shown in figure 3.2. The number of articles from which the terms were extracted is indicated as n=number next to each term.

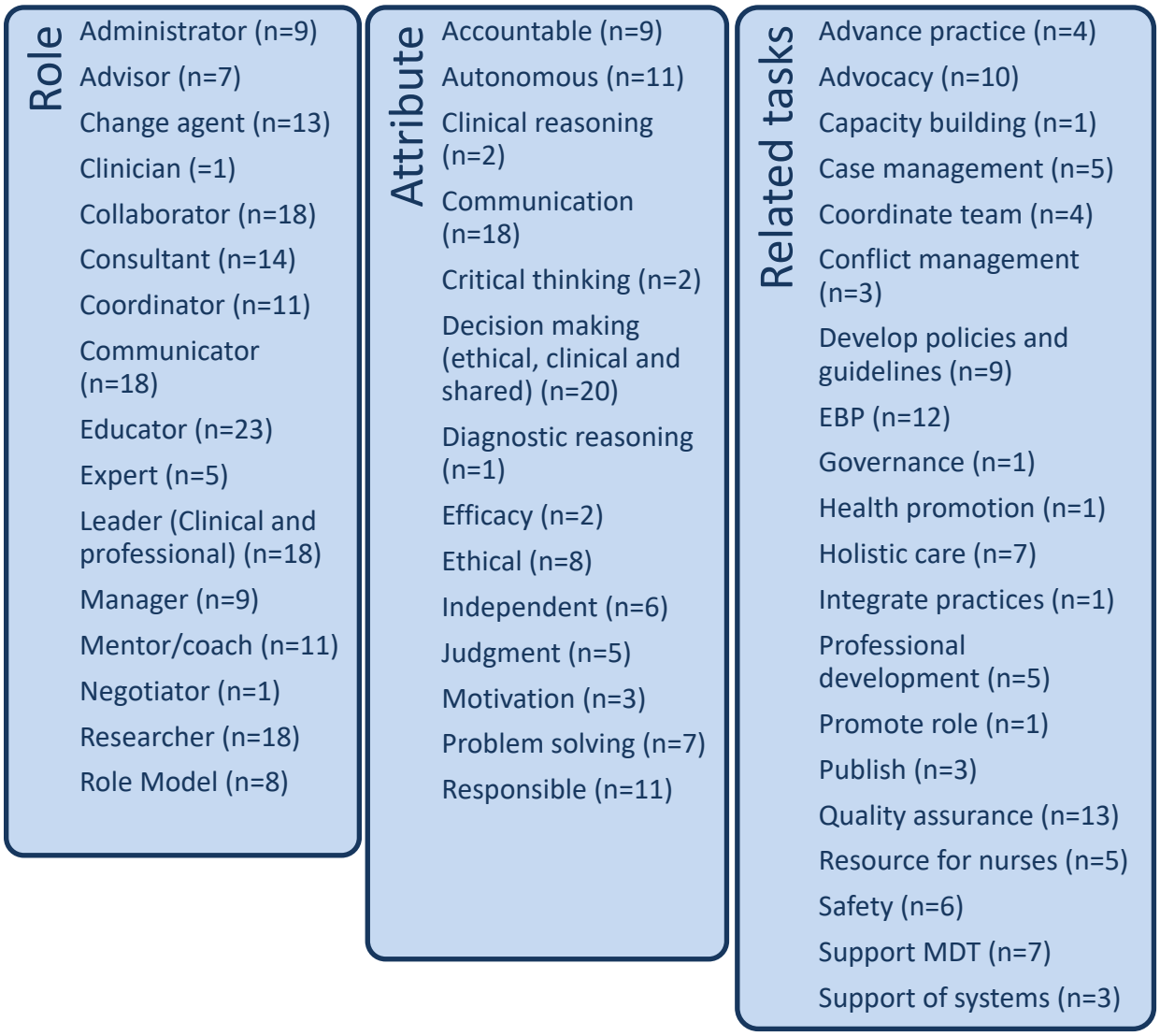

Figure 3.2 Key terms identified in review

Understanding the APN role is multifacted, as seen in the 49 key terms identitied across the 33 papers. The key terms clustered effortlessly into the categories of ‘roles’, ‘attributes’ and ‘related tasks’. The terms are interlinked and there is a functional relationship between the key terms across the categories, i.e. when taking on the role of ‘educator’, the communication attribute enables the related task of encouraging professional development. To fullfil a specific role, specific attributes are required to perform tasks related to that role. This is illustrated in the article by Begley *et al.* (2012) who stated, “The APN clinician had greater autonomy to make clinical decisions and could therefore process patients through the system more effectively.” In this statement, the role is ‘clinician’, the attributes are ‘autonomy’ and ‘clinical decisions’ and the related tasks for part of ‘case management’.

The complexity of the APN is illustrated by Gregorowski *et al.* (2012) who stated: “the role has traditionally been described through the four pillars of expert practice, leadership, education and research, […] these are complex and inter-related concepts that are not mutually exclusive.” Baldwin *et al.* (2013) also describe the APN role as complex as it involves a diverse range of activities across the domains of practice. However,they also stated that there is a mismatch between the role activities and domains of practice competencies, where service needs determine the role activities of the APN, which is not necessarily aligned to or appropriate for the APN’s expertise.

Chang et al. (2010) and Roche *et al.,* (2013) found in their respective studies that the APN take on many roles, which are enacted within the practice domains, to meet the healthcare needs. The roles are not specific to a practice domain but are designed to meet individual contexts’ needs based on work patterns and activities required by the work environment.

The key terms identified were not equally distributed across the articles, some were mentioned in more articles than others. Figure 3.3 illustrates the number of articles the key terms appeared in. The role of “educator” was mentioned in 23 articles and ‘collaborator’, ‘communicator’, ‘leader’ and ‘researcher’ roles were mentioned in 18 articles each. The APN functions primarily in clinical practice setting, yet the term ‘clinician’ was only mentioned in one article, further to this an APN is considered an expert nurse practitioner yet ‘being an expert’ was limited to 5 articles. The question then is: if a role is mentioned in more articles does it make the role more important? With the focus of the reviewed studies being on distinguishing the APN from the general nurse practitioner, the focus of key terms is likely over and above those expected of the general

nurse practitioner. It thus stands to reason that the key terms identified are specific to the APN.

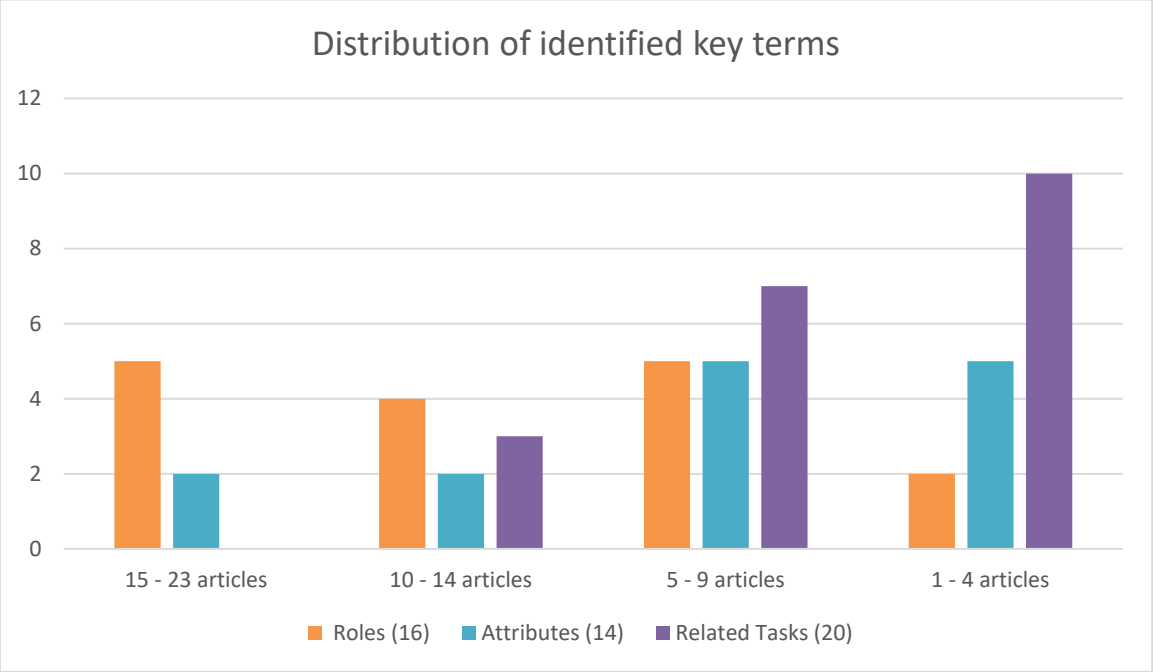

Figure 3.3 Distribution of terms

3.4.4.2. Stage 2: Latent content analysis

This scoping review explored the roles of APN and identified various roles, attributes and related tasks. Successful implementation of the APN role in the healthcare system is reliant on various factors and these have a direct influence on how curricula are developed to ensure a capable practitioner, ready to take on the role of an APN. Implementation of APN in the healthcare system emerged as the main theme from the scoping review. Table 3.6 shows the sub-themes identified during the latent content analysis.

Table 3.3.5 Theme and Sub-themes

Theme	Sub-themes
Implementing advanced practice nursing	i: Academic preparation ii: Role transitioning iii: Supporting the advanced practice nurse a) Management b) Peers c) Other Healthcare professionals

Theme I: Implementing Advanced Practice Nursing

To implement APN in the healthcare setting, one would need to understand the role, what the APN does, how they fit into the healthcare system and determine the of level of training required. According to the International Council of Nursing (ICN) (2008), APN requires in-depth expert knowledge as well as clinical competencies to enable expanded practice, working closely with other healthcare professionals. Internationally there is a shortage of healthcare professionals to meet the health needs of the country as seen in the Full Review of the Shortage Occupations List for the United Kingdom and Scotland, May 2019 (Migration Advisory Committee, 2019) which features all categories of nursing. This is evidence that a gap has been created in delivering quality and safe services. APN are not there to replace doctors nor to be a doctor's assistant or be just an extender of the doctor (Lowe *et al.*, 2012; Ter Maten-Speksnijder *et al.*, 2013) but to work independently from other healthcare professionals with expanded levels of autonomy and decision-making that facilitate the holistic care of patients (McKenna *et al.*, 2015). The APN with their unique skill set are therefore suited to filling the gap to meet healthcare needs of the country.

Studies on the role development of the APN highlighted the importance of standards, educational preparation, clear role definitions and the protection of the title of APN. Chang *et al.* (2012); Gardner *et al.* (2012) and Fulton *et al.* (2016) indicated that without the standards and role definitions, confusion among the community and healthcare disciplines might be created which, in turn, will negatively impact service delivery. Williamson *et al.* (2012) illustrated the need for clear role definitions and expectations in their study. The participants felt the APN is seen as the '*Lynchpin*' who facilitates and coordinates holistic patient care; however, this led to role conflict and variable levels of acceptance by stakeholders. Studies conducted in various countries stressed the importance of clearly defined roles and role expectations, as the absence thereof will result in either role overload or underutilisation of the role (Mick & Ackerman, 2000; Gardner *et al.*, 2012; Williamson *et al.*, 2012; Fry *et al.*, 2013; Ter Maten-Speksnijder *et al.*, 2013; Lowe *et al.*, 2014; Bryant-Lukosius *et al.*, 2016 and Coyne *et al.*, 2016).

Three sub-themes emerged from the literature when implementing APN in the healthcare system, namely: the academic preparation of the APN; the transitioning into the role of the APN and finally the support needed to ensure sustainability of APN.

Sub-theme i: Academic preparation

Nursing in South Africa is expanding the scope of practice of nurses with the inclusion of specialist nurses to meet the growing healthcare needs of the country. The APN is internationally considered to include the clinical nurse specialist (e.g. Midwifery, Critical Care and Child Health) and the nurse practitioner, therefore the new proposed nursing qualifications in South Africa will align to global scope of the APN (ICN, 2008). With the evidence of varied levels of APN training globally, it is important that in designing the South African specialist curriculum, contextual appropriateness and evidence-based quality is ensured.

The articles reviewed highlighted the lack of consistency in the level of academic preparation, the skills required and regulations for the APN role across the countries and health care contexts. This is compounded by the lack of consensus with regards to titling of the various APN categories, which further causes confusion and compromises training programme outcomes (Woods, 1996; Jokiniemi *et al.*, 2012; Lowe *et al.*, 2012 and Sastre-Fullana *et al.*, 2014). Performance expectations of the APN should be determined by educational preparation and practice guidelines. A planned approach to APN preparation can have a significant impact on practice outcomes across clinical settings (Fulton *et al.*, 2016).

Mick and Ackerman. (2000) defined APN as being distinguished from the generalist nurse roles by the elements of collaboration, scholarship and empowerment. Collaboration illustrates the ability of APN to integrate the unique skill sets of all healthcare professionals involved in patient care towards meeting the goals for excellent healthcare. Scholarship is reflected in the everyday decision making and nursing action taken - all based on continuous inquiry and evidence-based practices. Lastly, empowerment is linked to the level of autonomy, accountability and independency of the practitioner.

Mick and Ackerman (2000), Honig *et al.* (2011), Lowe *et al.* (2012), Roch *et al.* (2013), Kilpatrick *et al.* (2014), and O'Connell *et al.* (2014) highlight the relationship between academic or educational preparation and the level of autonomy, accountability, proficiency and independency. The ICN (2008) definition of APN states that APN should have an expert knowledge base in the speciality field together with the skills competencies for the advanced practice environment. The importance of level of functioning of the APN is further illustrated by the definition of professional autonomy which states, "having the authority to make clinical decisions and the freedom to act in accordance with your knowledge base" (Skår, 2009). It is therefore expected that most countries require at least

a master's degree to register as an APN (Honig *et al.,* 2011), which is in line with the recommendations of the International Council of Nurses (ICN, 2008). However, this is not reflected in international practice and the current plan for the Clinical Nursing Science programme in South Africa is at a postgraduate diploma level.

The implementation of the role in practice will be negatively impacted without proper regulations and educational standards (Kilpatrick *et al.*, 2014). Mick and Ackerman (2000) highlighted in the early years of the development of APN curricula that it should be focussed on the expectations of the role and the level of preparation between the various categories of nurses, and should differ on aspects of "diagnostic reasoning, management of health problems, systems thinking, leadership, interdisciplinary collaboration, autonomy and research".

To prepare nurses at master's degree level, educators should themselves be prepared at masters level or higher to facilitate the programmes. This might pose a problem in itself as there are not enough nursing faculties with the relevant practice and educational qualifications available to prepare faculty to teach APN (Woods, 1996). A further complication in the academic preparation of the APN is that educational programmes are built around specific clinical tasks and not around advanced practice roles and thinking (McKenna *et al.,* 2015). Due to health care organisations lack of clarity about what advanced practice is or should be and the focus on the contextual needs of the organisation, the development of the APN competencies and role adoption is influenced (Ter Maten-Speksnijder *et al.,* 2015).

Jokiniemi *et al.* (2012) urged countries in the developmental stage of APN implementation to take heed of the global alignment requirements of APN. This will allow for contextual comparability and global evaluation of the APN role and facilitate a cohesive evolution of the role.

Educational preparation at the right level is important to positively influence the roll out of APN globally. What is expected of the role is a key determinant for academic preparation and the development of curricula and should be valued during the development of the South African Clinical Nursing Science programmes.

Sub-theme ii: Role transitioning

From the review, it was evident for the APN role to be implemented successfully, that it is reliant on clear expectations of the role, standardised regulations and consistency in the level of academic preparation worldwide (Chang *et al.,* 2012). Mick and Ackerman, 2000;

Roche *et al.*, 2013 and O'Connell *et al.*, 2014 emphasised that without this evidence base to guide the profession, it caused role ambiguity that resulted in role dissonance and poor workforce planning leading to the underutilisation of skills. APN should be complementary to nursing practice models and advancing of the nursing role in the health care architecture, and not simply a substitution of tasks at a higher level (Lowe *et al.*, 2012). As noted in the Sub-theme I above, in the absence of a clear understanding of the role and the academic requirements for APN, implementation will be on an ad hoc basis and streamlined to meet the organisational needs of the employer rather than aligned to the scope of practice of the APN (Bryan-Lukosius *et al.*, 2004; Ter Maten-Speksnijder *et al.*, 2013; Gosselin *et al.*, 2015 and Fulton *et al.*, 2016).

Wickham (2013) stated that the absence of proper role definitions will result in practitioners being hindered from developing a professional identity, which leads to disparity in role activity and creates a feeling of being lost between roles (Lowe *et al.*, 2012 and Jangland *et al.*, 2016). As one participant stated in a study by Gregorowski *et al.* (2012) "there is no specific rule book… you have to seek opportunities to promote the role". In the early years of developing the APN role it was clear that it encompasses a blend of 'job components', and that the roles evolved and adapt constantly (Mick and Ackerman, 2000 and Wickham, 2013). Practice requirements vary across institutions, policies and regulations (Gosselin *et al.*, 2015), and largely due to a lack of strategic workforce planning, any nurse may be implored to adopt the APN role regardless of educational preparation (Woods, 1996).

The strength of APN will depend on the nursing profession to lobby for support and the regulations for advance practice. In the absence of a clear career pathway, the specific professional development for the APN is compromised, which makes staff retention challenging (McKenna *et al.*, 2015). The future of the APN role is dependent on development of competencies in all the practice domains and promoting professional development using the APN expertise in all practice domains (Bryant-Lukosius *et al.*, 2004).

Advanced Practice Nursing (APN) is more than working on medical problems. Transitioning to the APN role requires students to move outside their comfort zone of standardised medical care, based on medical protocols, and engage with the patients' healthcare needs - integrating nursing care with medical treatment (Ter Maten-Speksnijder *et al.*, 2015). It is therefore crucial for the APN to have enough exposure to the clinical

area, to gain confidence and experience in all practice domains, to promote the role and become a change agent to influence practice and the health care architecture as a whole (Baldwin *et al.*, 2012; Begley *et al.*, 2012; Fry *et al.*, 2013 and Gosselin *et al.*, 2015).
Time spent in the various practice domains impacts negatively on practice development, as most time is spent in clinical care, leaving little to no time for the practitioner to develop their educational, consultant and especially research competencies. Research informs practice as it provides evidence for quality improvement and therefore if the APN lacks knowledge supported by evidence and confidence to inform practice development, they are ill equipped to effect change (Chang *et al.*, 2012; Gregorowski *et al.*, 2012; Wickham, 2013 and Jangland *et al.*, 2016).
The transition from professional nurse to APN can be challenging and daunting. The newly qualified APN needs mentors and role models to guide their transition to APN and minimise the anxiety around the range of roles of an APN; explain the full scope of practice requirements and prevent them from becoming a mere doctor's assistant (Ter Maten-Speksnijder *et al.*, 2015). Mentorship and clinical supervision has a positive impact on how the role is embraced, however, the there is a scarcity of suitable APN mentors and supervisors due to the challenges of their already complex role demands (Elliot *et al.*, 2012; Fry *et al.*, 2013 and Jangland *et al.*, 2016).
The extensive role diversity, spreading over five (5) practice domains of the APN, as suggested in the Strong Model (Mick & Ackerman, 2004), creates an excessive workload and if poorly managed could result in role overload and working in isolation. Effective development and utilisation are reliant on well-defined practice guidelines that will enable the APN to establish themselves in practice and ensure quality patient care (Elliot *et al.*, 2012 and Jokiniemi *et al.*, 2012). With well-defined guidelines and practice requirements the APN is able to evaluate his/her own competencies against the guidelines and develop competencies in the areas they are not yet competent. Under-utilised areas reported in this scoping review, due to inexperience or lacking competencies, were research and nursing scholarly activities such as promoting the role, being a change agent and influencing practice change. For the promotion of APN and professional development, it is imperative to create a platform for the APN to be capable of functioning on all levels with confidence and the needed expertise (Bryant-Lukosius *et al.*, 2004; Gregorowski *et al.*, 2012; Wickham, 2013; McKenna *et al.*, 2015; Bryant-Lukosius *et al.*, 2016 and Westrick *et al.*, 2016).

Professional development in APN is progressive and moving in a direction where the advanced expertise and services are needed. From the articles reviewed it is evident that APN can only be successful if all stakeholders have the same understanding of the roles, responsibilities and activities of an APN. Clear guidelines inform the development of and guide the transitioning of the generalist nurse to adoption of the roles of the APN. Without these, APN will ultimately simply be an additional category nurse with some task shifting within the unit, and underutilisation of the expertise that the APN could offer.

The SANC has developed a general framework for APN in the South African context, however, to date no regulations have been published to direct the implementation of the APN in the practice environment. This has created uncertainty as to what can be expected of this category of nurse and impacts on the development of appropriate curricula preparing nurses to take up this role in future.

Sub-theme iii: Supporting the advanced practice nurse

Role ambiguity is the biggest challenge APN face when implementing the role. For the implementation to be successful it is reliant on being supported by the various stakeholders. Implementation needs an altered working relationship and team management with reallocation of tasks (Kilpatrick *et al.*, 2014). The success of APN is also dependent on a defined role description, set practice guidelines and most importantly a supportive environment (Elliot *et al.*, 2012).

Role enactment is influenced by factors such as a deficiency of support, role challenges amongst peers and interaction challenges with the multidisciplinary team (Jokiniemi *et al.*, 2012). Support is needed from the onset of introducing the role in practice for it to develop and expand or it will lose its efficacy (Chang *et al.*, 2012 and Coyne *et al.*, 2016).

a) Role of management

Stakeholders including managers do not understand or recognise the importance of the APN role, therefore they provide limited support which complicates the implementation and maintenance of the role in practice (Jokiniemi *et al.*, 2012; Kilpatrick *et al.*, 2014; McKenna *et al*., 2015; Bryant-Lukosius *et al.*, 2016).

APN roles are being undermined by the system with limited to no support from managers which impact nursing negatively as it limits nurses to practice to the full extent of their scope of practice (McKenna *et al.*, 2015). APN are a pivotal link between medical and

nursing teams, acting as a lynchpin facilitating all aspects of patient care and need support from management to ensure sustainability of role (Williamson *et al.*, 2012).

At unit level, managers were concerned about registered nurses becoming too reliant on the APN to make decisions and providing holistic care and that it will lead to deskilling of registered nurses. Furthermore, unit managers saw the APN role as overlapping with theirs, which also led to no support being provided to the APN (Kilpatrick *et al.*, 2014). This uncertainty of the role created high expectations and difficult work relationships for the APN and has the potential to undermine the APN role and limited support impacts negatively on further skill development (Jokiniemi *et al.*, 2012 and Gosselin *et al.*, 2015).

b) *Role of Peers*

Introducing a new role is difficult in itself and needs support from their peers and other nursing colleagues. This will minimize the effect of challenges that might arise during implementation (Jangland *et al.*, 2016). Resistance to APN was mainly due to redefining of professional boundaries which created challenges in what nursing is and does (Lowe *et al.*, 2012). Challenges faced by the APN were due to lack of knowledge and understanding about the role, as well as to the absence of a peer network to discuss and manage challenges. To gain the support of their peers APN should engage in debate to advocate for, and promote, the role (Ter Maten-Speksnijder *et al.*, 2013 and Gosselin *et al.*, 2015) Gregorowski *et al.* (2012) reported that APN found it difficult to change the mindset of people within the organisation and had to 'jump through hoops' to overcome obstacles such as balancing multiple demands of the role and being a mentor and support for other nursing staff. However, Jangland *et al.* (2016) stated that if management supported their role it minimises the challenges faced by peers and they gained support. Once the peers and stakeholders understood the role and saw the benefit and contribution of the APN they were accepted and supported (Farrell *et al.*, 2015 and Coyne *et al.*, 2016). Nurses and patients reported that the APN was a resource and could 'translate' medical instructions, inspired confidence in nurses by being a role model and mentor (Williamson *et al.*, 2012; Fry *et al.*, 2013 and Wickham, 2013).

c) Other healthcare professionals

APN were seen as a threat to physician status and were feared to be taking over the physicians role (Ter Maten-Speksnijder *et al.*, 2013; Gosselin *et al.*, 2015 and Jangland *et al.*, 2016) General practitioners felt that APN do not have the ability to work independently and should assume the role of the doctor's assistant. Organisational pressures brought tension between professionals due to different expectations of the APN

by various healthcare professionals. The APN role was seen to be aligned to medical protocols supervised by medical doctors rather than nursing scholarship which added to the conflict (Mick & Ackerman, 2000; Fry *et al.*, 2013 and Ter Maten-Speksnijder *et al.*, 2013). The resistance from the medical fraternity led to APN feeling that they had lost their professional identity and created feelings of guilt about their role (Jangland *et al.*, 2016). The lack of trust led to altered work relationships that undermine the achievements of the APN, role overload and ultimately them working in isolation (Jokiniemi *et al.*, 2012 and Kilpatrick *et al.*, 2014).

In the study conducted by Begley *et al*. (2012), however, healthcare professionals commented on the contribution APN make to healthcare and concluded that healthcare services are improved due to the APN's level of autonomy and clinical decision-making ability that enabled a more efficient process through the healthcare system.

The uptake of APN depends on the leadership and stakeholder view of APN. When the role is clearly communicated, and expectations guided the APN has been accepted in the multidisciplinary team and played a vital role in delivering quality patient care.

3.5. Lessons learnt from Scoping review

Having an understanding of what an APN is and what an APN does is important for the development of an academic programme as it informs content development at the appropriate academic level and structured in such a way to prepare candidates to function within a specialist environment. However, lessons learnt from the scoping review goes beyond mere academic preparation of the APN, it also reflected the soft skills required by the APN to be influential in setting standards and moving the nursing profession forward that would form the basis of the scholarship in APN course.

From the international perspective APN has been implemented to alleviate the pressures of changing healthcare needs and shortages of healthcare professionals. The aim of APN is to improve the quality of healthcare services rendered, to strengthen the nursing leadership role within healthcare and finally to create career opportunities for nurses to retain clinical expertise within the practice setting. However, a clear understanding of APN is required to ensure a meaningful contribution to the meet the healthcare needs of the country. This is no different from the objectives of the South African context. Nurses are the backbone of the healthcare environment and need to expand the influence and contribution to the healthcare system.

The aim of this scoping review was to identify the roles of APN to enable the development of an appropriate curriculum for the South African context. We know APN functions at an expert level and the core functions of expert practice include professional leadership and consultancy; education training and development; practice and service development and research and evaluation. This indicates what the APN should know to fulfil their role in the clinical setting and is much broader than a set of clinical competencies. The complexity of the APN role was highlighted in the review and indicated that for the APN to have an impact in healthcare the APN should be prepared in all role domains equally and developing academic programmes for APN all aspects should be considered to differentiate between generalist and specialist practitioners.

From the literature review, definitions of APN practice included:

- Independent – not being controlled or influenced by people, events or things
- Autonomous – having the power to make your own decisions; to govern your own actions.
- Accountable – taking responsibility to justify actions and decisions taken.
- Expert – knowledgeable in a specific area
- Scholarly – learning at a high level, showing knowledge and devotion to constant inquiry

These aspects describe the heart of what an APN is and should be able to do and is imperative for inclusion in the curricula for APN. Focussing academic efforts on these 5 aspects will enhance the ability of successful implementation of an APN in practice.

The specialist nurse as an APN, in the South African context, will be facing many of the challenges discussed in the literature review. An academic programme developed for the preparation of the APN can easily be developed, however without clear expectations and needed support from industry, implementation into practice is going to be challenging.

Unless students, entering into academic programmes to become an APN, are supported in their programme to deal with issues in all practice domains it will not be possible to effect their clinical roles being a change agent that challenges the status quo and moving the profession of nursing forward.

3.6. Conclusion

In this chapter a review of the roles of the APN from an international perspective was done. Comprehending the role of the APN provided a foundation for the development of the course for the South African context. In the next chapter, reaching consensus on the essential roles of APN and the development of concepts will be presented.

Chapter 4. Concept analysis, clarification, and exploration (Phase 2)

4.1. Introduction

The second phase of the DDR process is described in this chapter showing the process followed to identify concepts for the development of the course for APN from the South African perspective. This was done in two stages as indicated in Chapter 2.

The first stage, rank order scale technique (ROS), set the scene for determining objectives for the course development in that it highlights the important issues to be addressed in the course, whereas the nominal group discussion, as the second stage, determine the scope within the South African context.

4.2. Rank Order Scale (ROS)

The purpose of the Rank Order Scale (ROS) was to identify, from the South African nurses' perspective, what they consider to be the most important roles and attributes of an APN as identified in the international literature. As explained in Chapter 2, ROS is useful to compel respondents to place objects in a specific order and in this instance, order of importance, for a specific speciality.

The ROS had two questions which required the respondents to first rank the roles of APN and secondly the attributes of APN in order of importance for their chosen nursing speciality for the South African context. The roles and attributes of APN were identified in the scoping review (Chapter 3) and are illustrated in tables 4.1 and 4.2 respectively.

4.2.1. Results: Respondent demographics

Fifty-two (n=52) responses were captured on RedCap®, however, eleven (11) response entries were blank and seven (7) response entries were incomplete and were excluded. A further four (4) entries completed only the first part of the ROS, ranking of the importance of the roles, but did not attempt the second part, ranking of the importance of the attributes, of the ROS. The response rate therefore differed from the first part with thirty-four (34) respondents, which is a 65% response rate, to thirty (30) responses with a 57.6% response rate for the second part of the ROS.

Table 4.1 shows the representation of the captured nursing speciality by the respondents on the ROS. All the nursing specialities were represented in the responses with twelve (12) respondents having recorded Nursing education, a non-clinical speciality, as their speciality. Although this is the highest number for a specific speciality it only represents 35% of the responses. The non-clinical specialities (nursing education and nursing management) represents 41% of the responses and the remaining nursing specialities recorded are seen as clinical specialities and represents 59% of the responses. All but one of the nursing specialities captured are offered at the research setting. The exception is a wound care specialist – nursing speciality which is not offered as a course at the research setting.

Table 4.1 Responses per nursing speciality

Nursing Speciality identified in responses	Number of respondents
Trauma and emergency	2
Intensive Care (ICU) adult	6
Oncology	2
Occupational health	2
Midwifery	3
Nursing management	2
Nursing education	12
Nephrology	1
Psychiatric nursing	1
Child health	1
Infection and prevention control	1
Wound care specialist	1

Professional nurses might have a qualification in more than one nursing speciality and can be a combination of a clinical and non-clinical qualification, for example a professional nurse might be a qualified intensive care nurse and has a nursing education and or nursing management qualification as well; or be in possession of two (2) clinical qualifications, for example be a qualified intensive care nurse and a wound care specialist. It is unclear how the respondents chose their nursing speciality captured on the ROS as well as how many respondents indicating their speciality as nursing education (non-clinical) being in the possession of a clinical nursing speciality as well.

4.2.2. Results: Ranking of the Roles

The roles of APN, identified in the scoping review (Chapter 3), representing the international context which were used for the first question of the ROS are illustrated in table 4.1.

Table 4.1 Roles of APN

Roles of Advanced Practice Nurses			
Administrator	Collaborator	Educator	Mentor / Coach
Advisor	Communicator	Expert	Negotiator
Change agent	Consultant	Leader	Researcher
Clinician	Coordinator	Manager	Role Model

The roles could be ranked from 1 (most important) to 16 (least important) and a total or summary score was then calculated. An item could get a maximum score of 544 and was calculated as follows: Importance score x number of responses (16 x 34 = 544). The summary scores allowed for ranking the roles from the least important (lowest score) to the most important (highest score). The summary scores in percentages are displayed in figure 4.1.

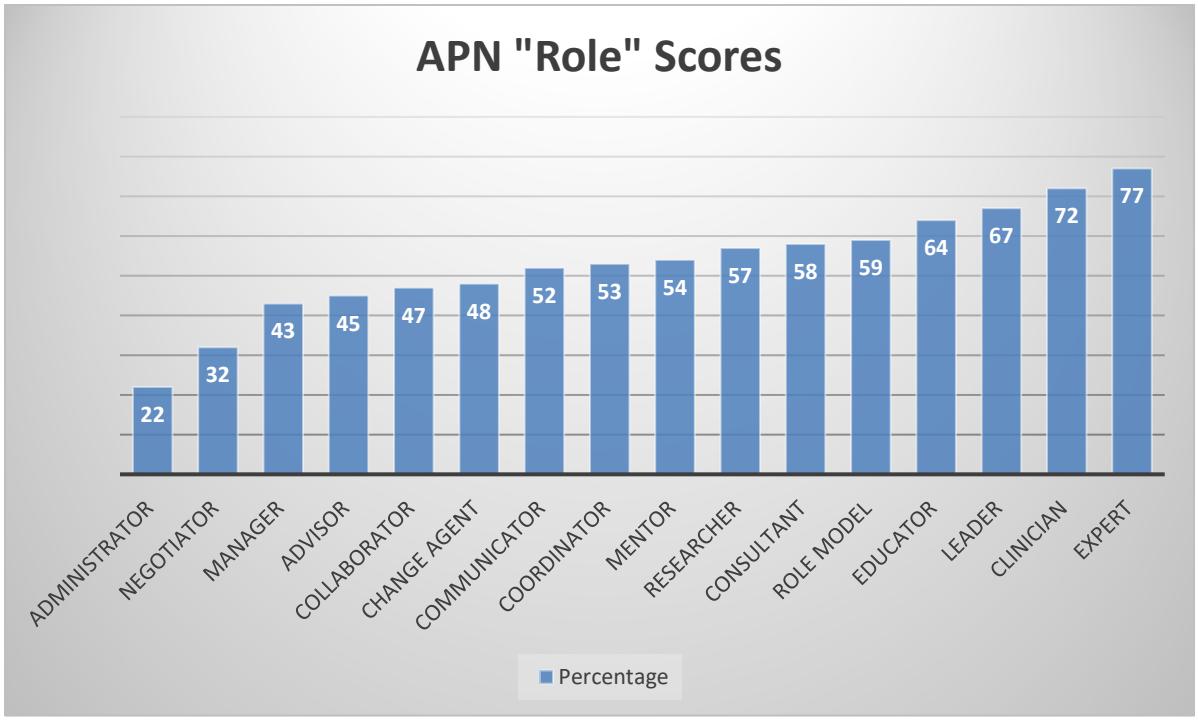

Figure 4.1 Summary scores of the "roles"

The “role” which scored the lowest was that of *administrator* acquiring only 122 points out of a possible 544 which indicates the majority of the participants ranked this particular role as the least important of the nursing specialities. Figure 4.2 illustrates the ranking by the participants of the role *administrator.* One (1) respondent each ranked the role of

administrator in the second, third, sixth, seventh, ninth and twelfth place. Fifteen (15) or 44% of the respondents placed the role of administrator in the last place indicating it is the least important role of APN.

The role of *expert* obtained the highest score (419) and is ranked as the most important role for APN in the South African context. The ranking results for this role is illustrated in figure 4.3 showing only one (1) respondent ranking being an 'expert' as the least important role for APN, and twenty-four (24) respondents ranked being an 'expert' in the top 1 – 5 positions.

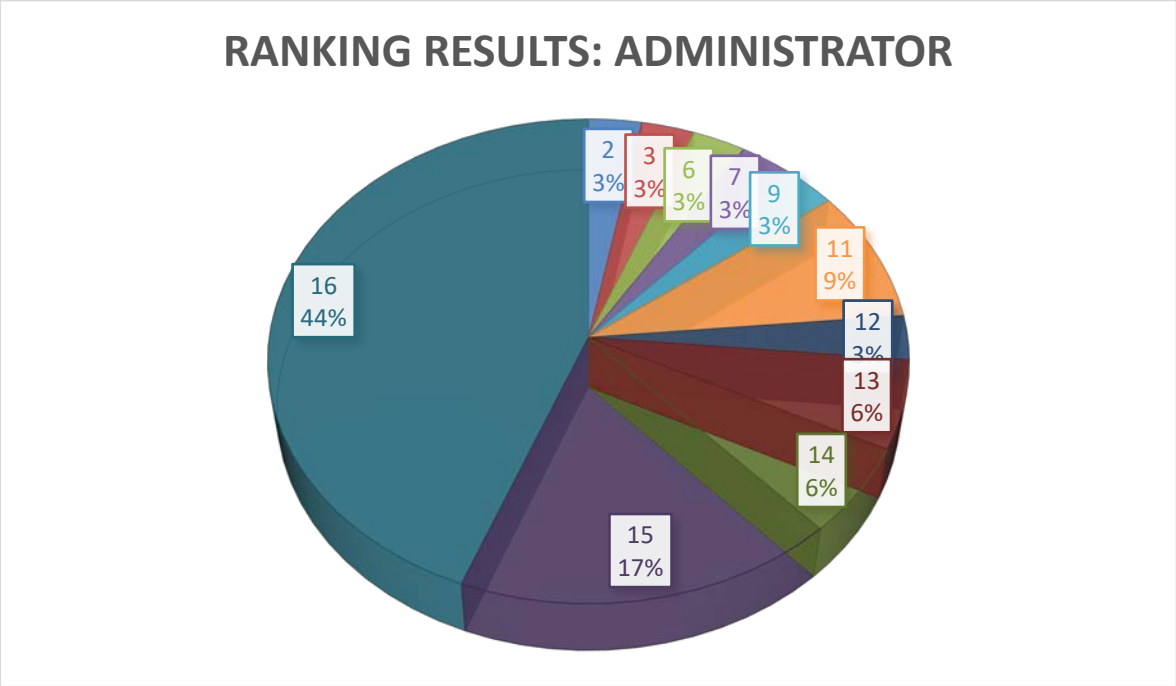

Figure 4.2 Rankings of the role "administrator"

Figure 4.3 Ranking results of "expert"

In figures 4.4 – 4.7, the ranking results are displayed showing how many respondents ranked a particular role in a specific position. As reported in figures 4.2 and 4.3, which represents the least important and most important role of APN according to the respondents, the majority of respondents ranked these two roles similarly as the ranking scores were concentrated in either the bottom third for the least important, and the top third for the most important.

For all the remaining roles ranked in the ROS the ranking results were spread over all positions.

In figure 4.4 the top four (4) roles, based on the summary score outcome, are shown with the majority of respondents ranking these four (4) roles in the top 10 positions, however, the role of educator indicates eight (8) respondents ranked this role in first place or as the most important role, more than the role of clinician (7 respondents) or leader (3 respondents), yet with the summary score the role of educator was ranked in fourth place.

Figure 4.5 illustrates the second grouping (fifth to eighth place according to the summary score) with the respondents' ranking indicate a concentration within the top ten places. The outlier in this group is the role of consultant which is ranked in 6th place on the summary scores, yet five (5) respondents ranked the role of consultant in 15th place.

The third group (figure 4.6) representing the third grouping (ninth to twelfth place according to the summary score ranking) is consistent with the ranking of the respondents as it is grouped around the tenth and twelfth positions except for the role of coordinator where eight (8) respondents ranked it in the seventh position.

The final four (4) roles shown in figure 4.7 represent the bottom four roles and the ranking of the respondents corresponds with the ranking based on the summary scores.

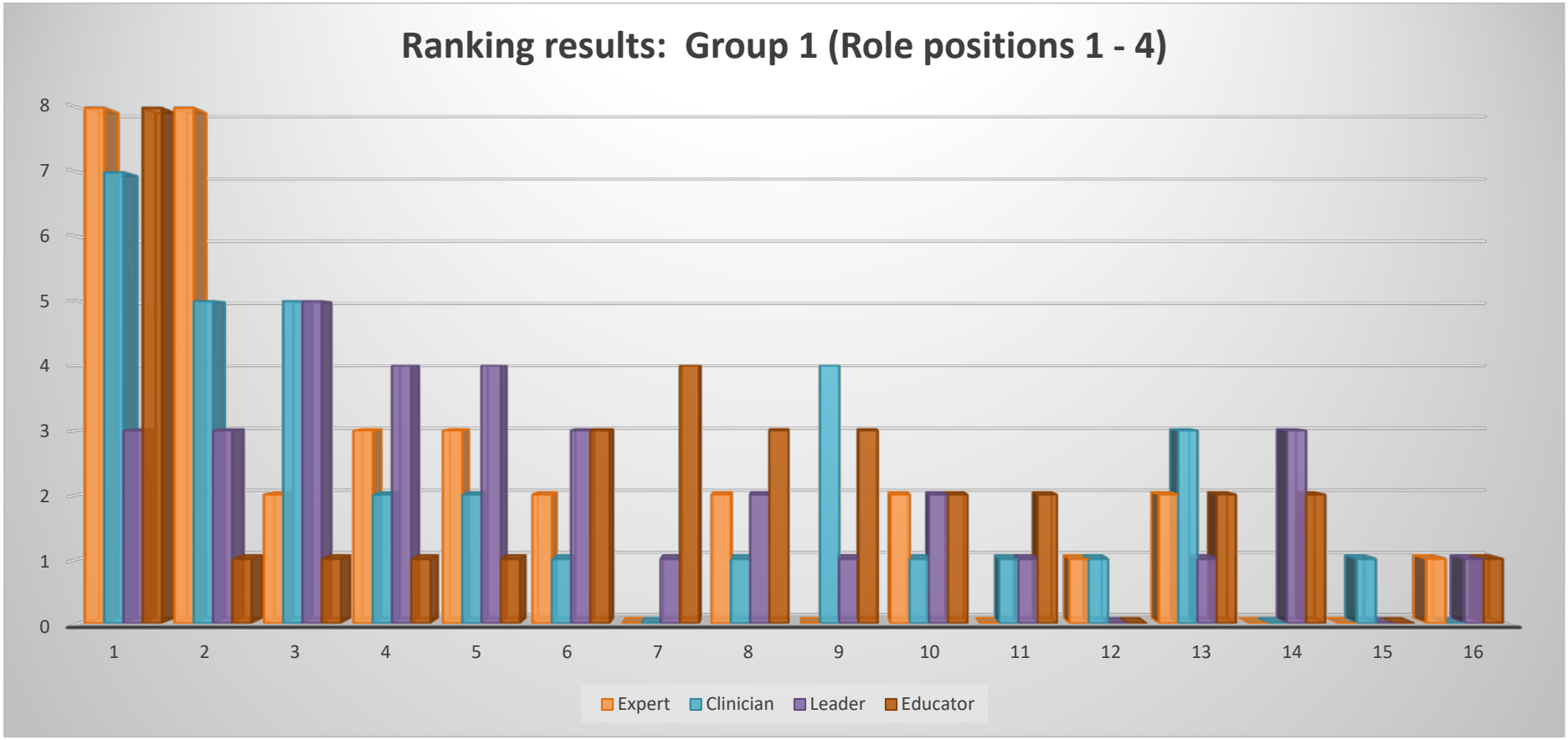

Figure 4.4 Ranking results: Group 1 (Role positions 1 - 4)

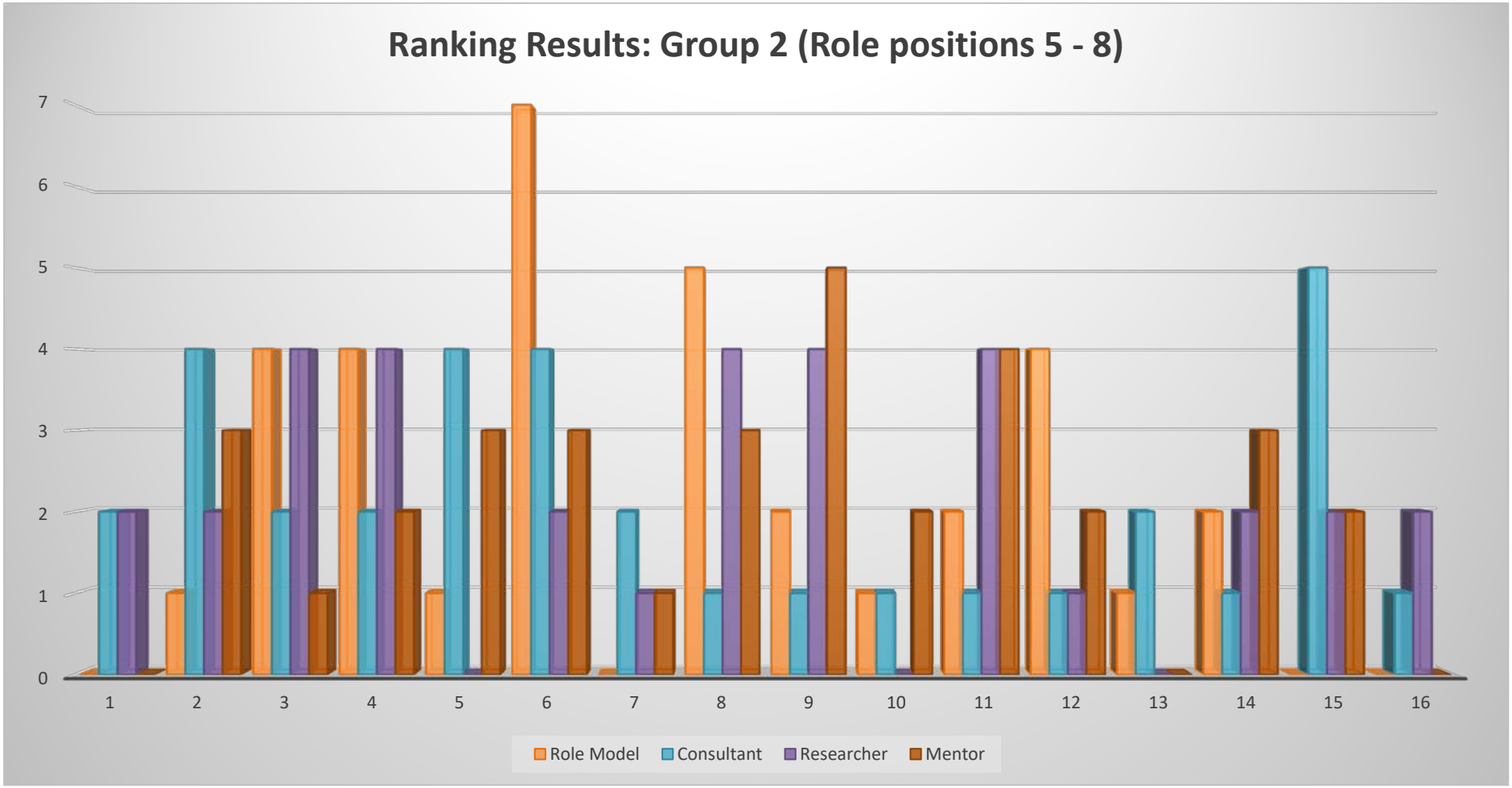

Figure 4.5 Ranking results – Group 2 (Role positions 5 – 8)

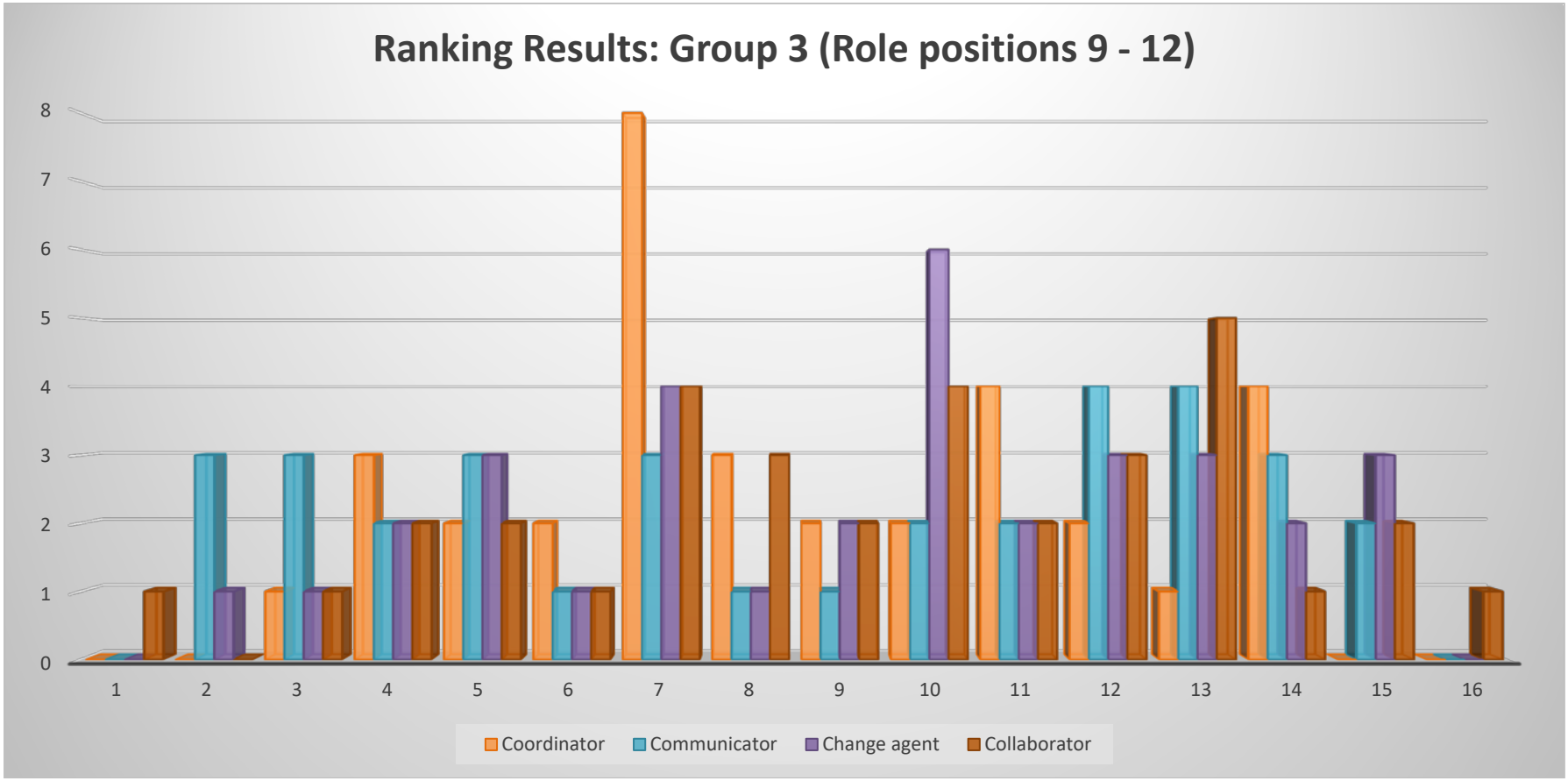

Figure 4.6 Ranking results – Group 3 (Role positions 9 – 12)

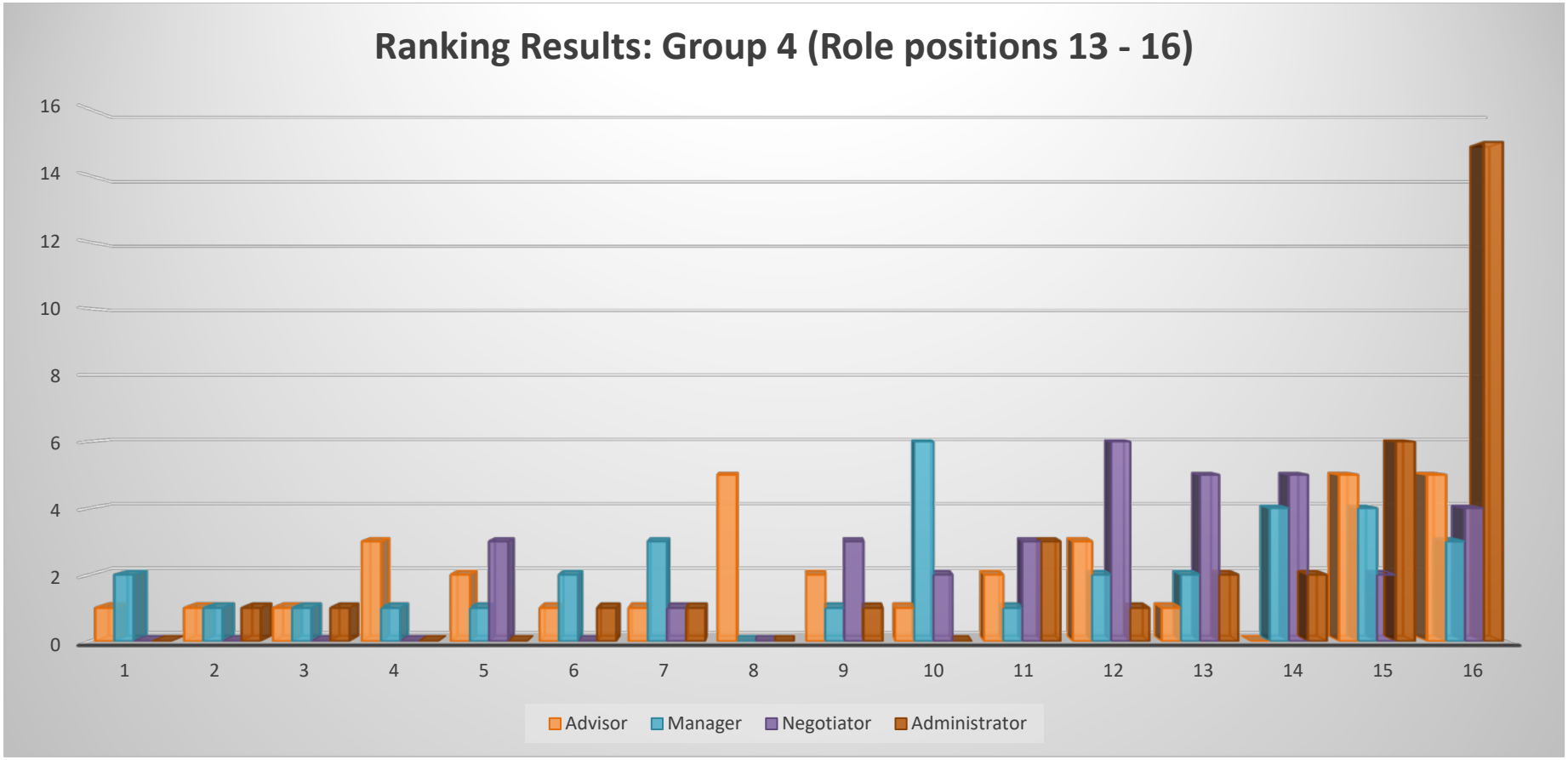

Figure 4.7 Ranking results – Group 4 (Role positions 13 – 16)

4.2.3. Results: Ranking of the Attributes

The second question of the ROS required the respondents to rank the attributes in order of importance to their specific nursing speciality and the attributes presented in the ROS is listed in table 4.2.

Table 4.2 List of Attributes of APN

Attributes of Advanced Practice Nurses			
Accountable	Critical Thinking	Ethical	Motivation
Autonomous	Diagnostic Reasoning	Independent	Problem Solving
Clinical Reasoning	Efficacy	Judgement	Responsible

The attributes could be ranked position 1 (most important) to position 12 (least important) and the same calculations were performed as for the roles. For this part of the ROS only thirty (30) respondents completed the question and the total score an item could obtain was 360. The summary scores are presented in figure 4.8 as percentages.

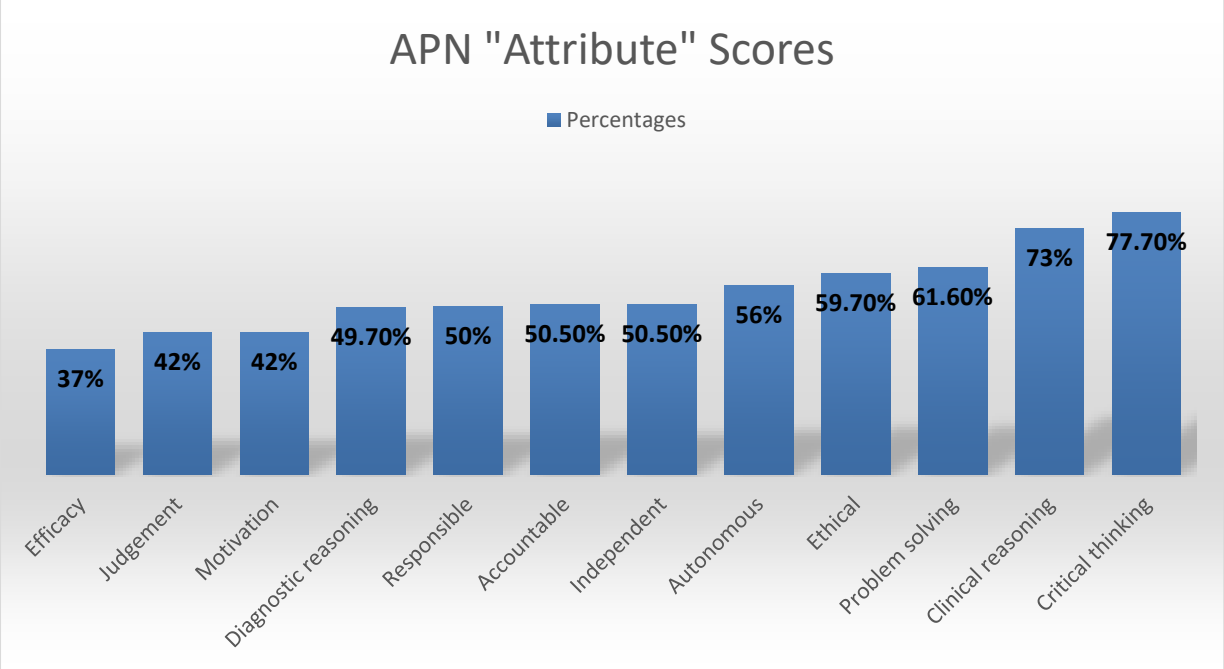

Figure 4.8 Summary scores for APN attributes

The attribute ranked, by the respondents, as the least important was efficacy with a summary score of 134 out of a possible 360. Figure 4.9 illustrated the rank order results for this attribute.

Figure 4.9 Results for "efficacy"

The majority of the respondents (53%) ranked the attribute *efficacy* as the least important, with eight (8) ranking it in the twelfth position, one (1) in the eleventh position and seven (7) in the tenth position. Only one (1) respondent ranked 'efficacy' as the most important (ranked as number 1) attribute for APN.

On the other end, 'critical thinking' was ranked in the top position as the most important attribute of APN with a score of 280 out of 360 and the ranking results are illustrated in figure 4.10. Nineteen (19) respondents (63%) ranked the attribute: 'critical thinking' in the first to third position of importance. Critical thinking was only ranked in position twelfth, or least important, by one (1) respondent.

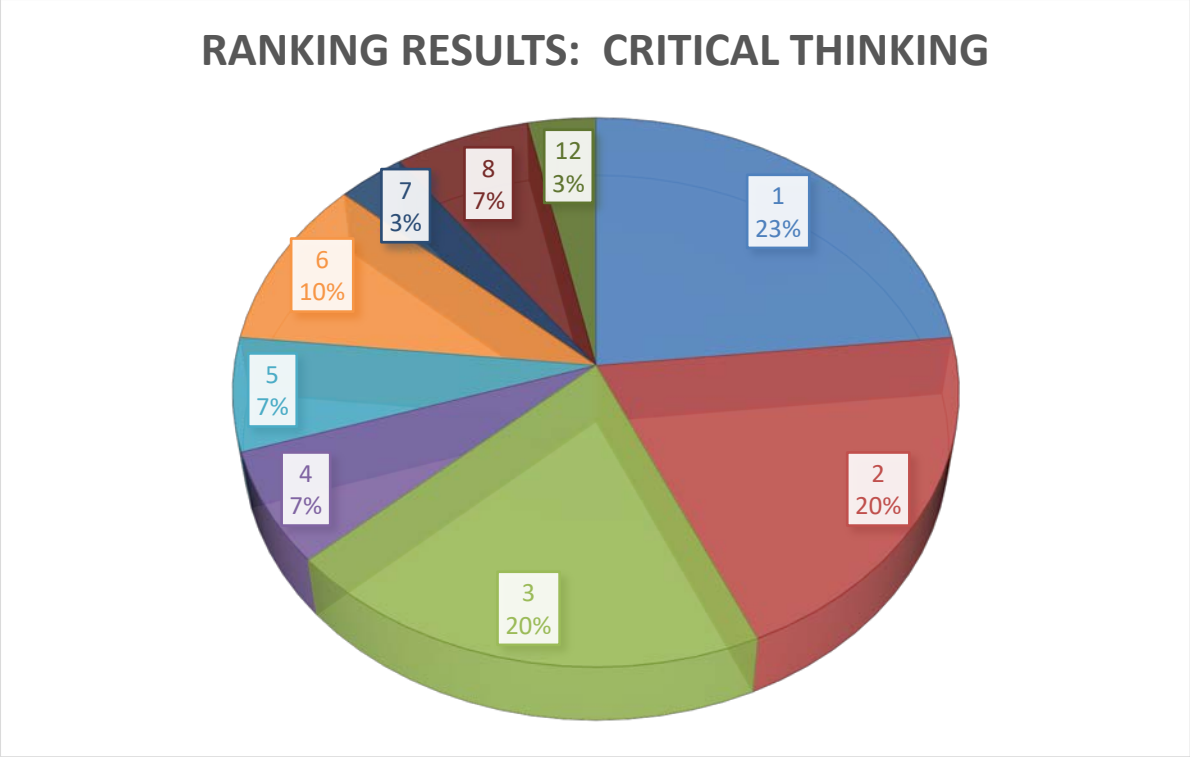

Figure 4.10 Ranking results for attribute "critical thinking"

Figures 4.11 to 4.13 show the number of respondents ranking a particular attribute at a specific position (1 – 12). The attributes is divided into three (3) groups figure 4.11 showing the top four (4) attributes according to the summary score; figure 4.12 the middle four (4) attributes and figure 4.13 the bottom four (4) attributes.

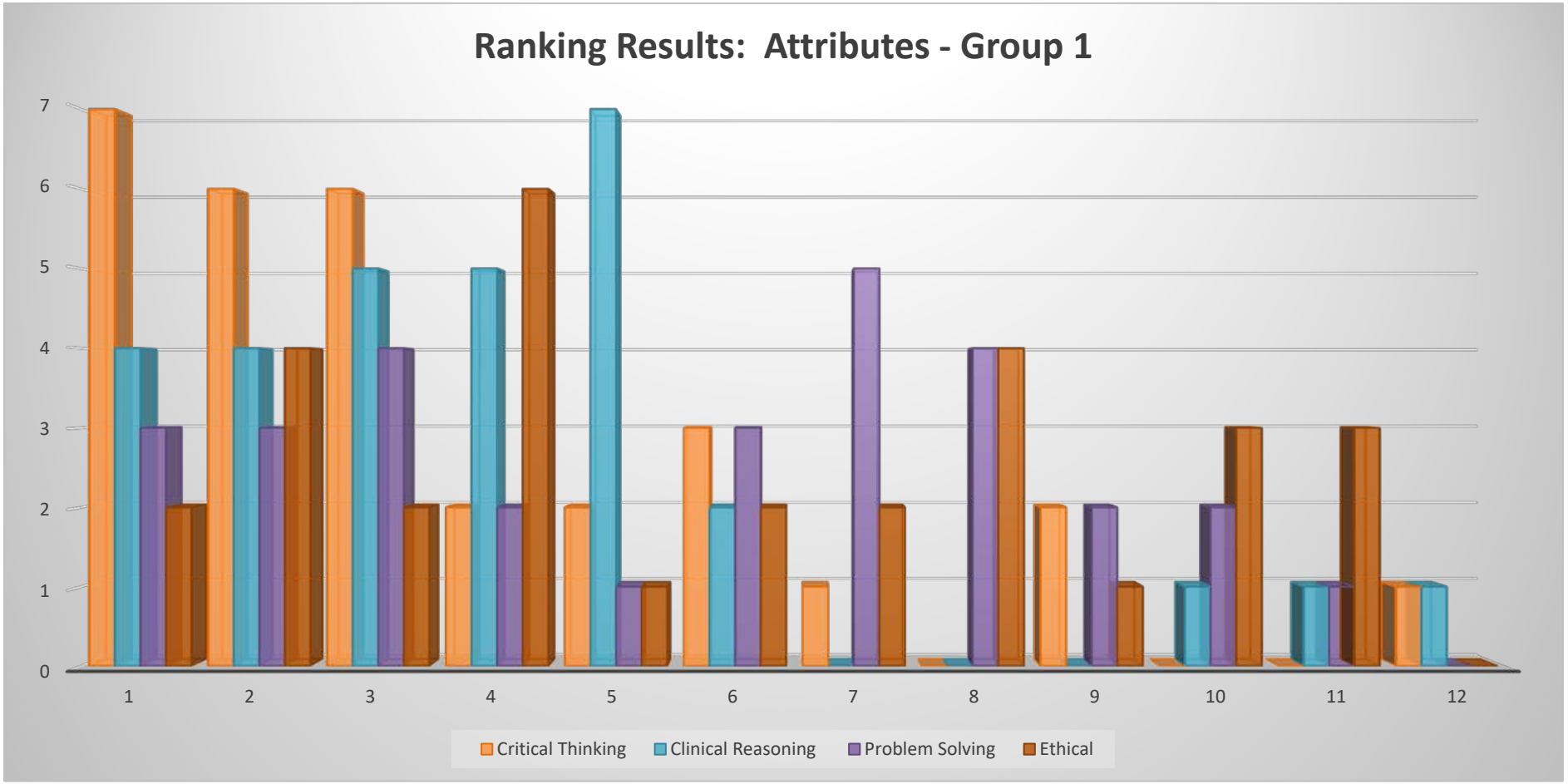

Figure 4.11 Ranking results: attributes group 1

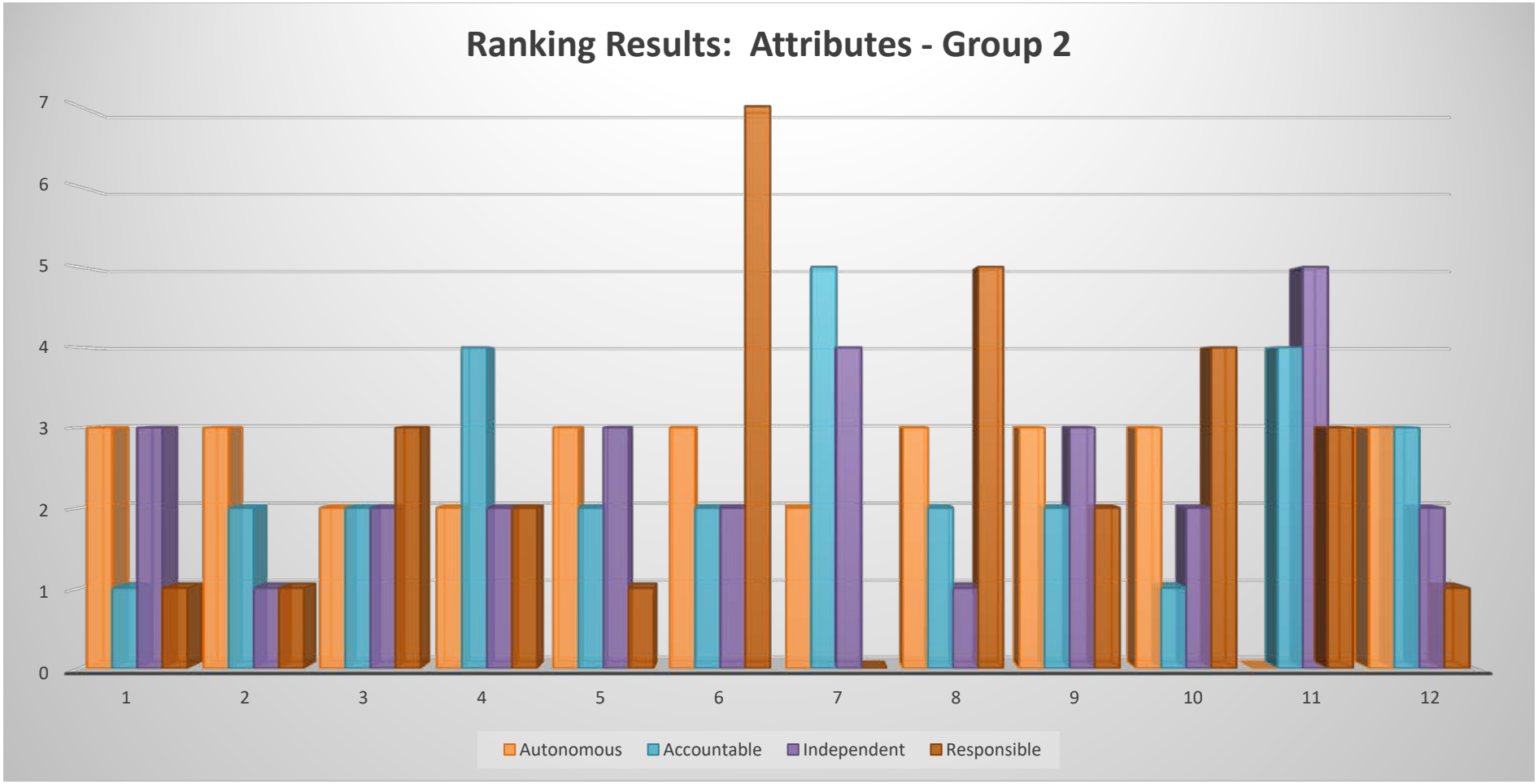

Figure 4.12 Ranking results: attributes group 2

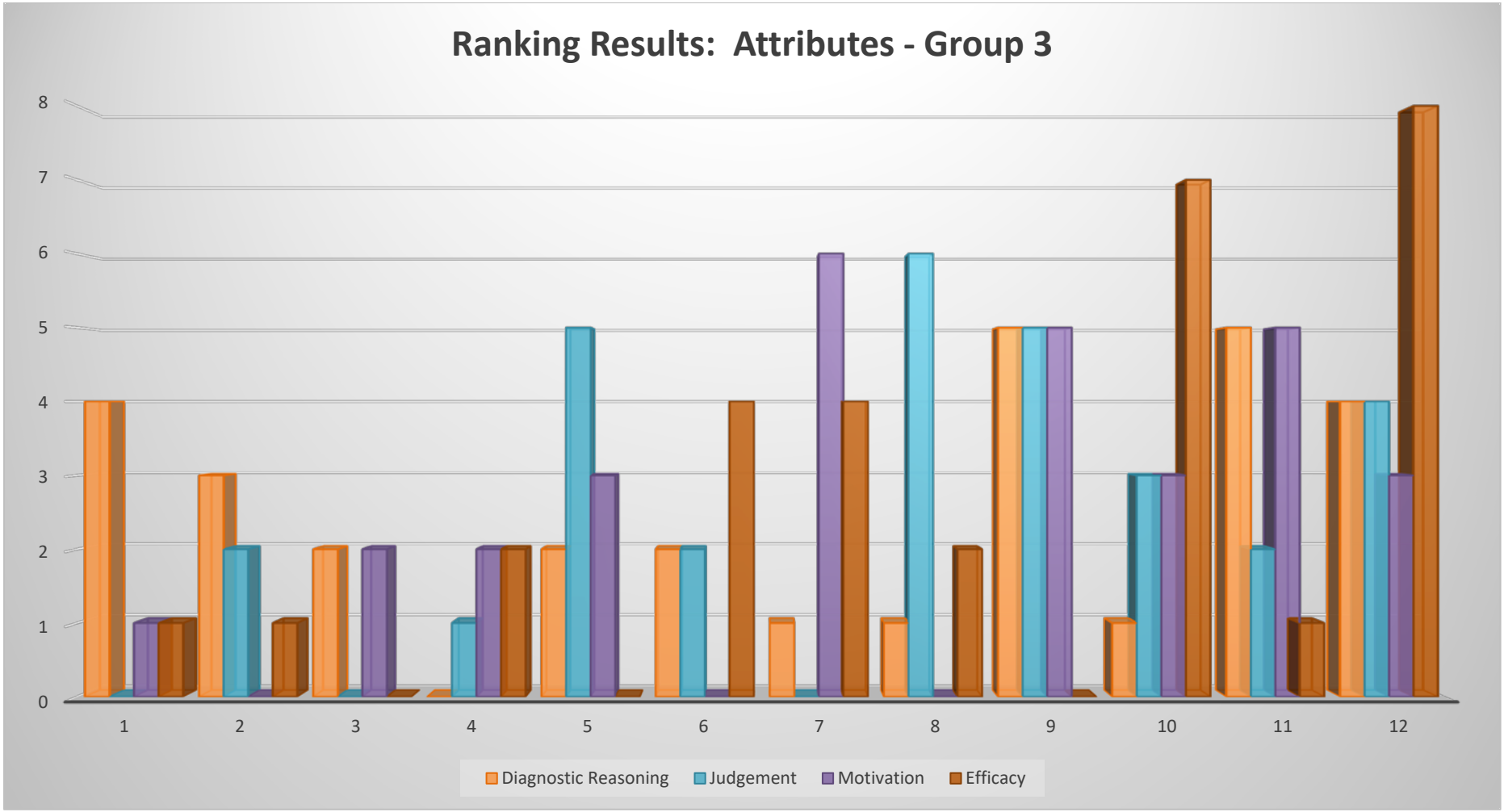

Figure 4.13 Ranking results: attributes group 3

Attributes clustered in group 1 (figure 4.11) show the top four (4) attributes according to the summary score. The respondents ranked these four (4) attributes within the top five (5) positions. Twenty-three (23) respondents (76%) ranked the attribute critical thinking under the top 5 positions and twenty-five (25) respondents (83%) ranked the attribute 'clinical reasoning' under the top 5 positions. The attributes 'problem solving' and 'ethical' showed a different picture with thirteen (13) or 43% and fifteen (15) or 50% of the respondents respectively ranking the attributes under the top 5.

Figure 4.12 illustrates how the respondents ranked the attributes taking the position of fifth to eighth place. The results show the respondents considered these attributes as important but not as the most important, with summary scores between attributes close to one another.

Group 3 (figure 4.13) shows the bottom four (4) attributes and illustrates the majority of the respondents felt these attributes were the least important for their respective nursing speciality.

4.2.4. Discussion: Rank Order Scale

The objective for using the ROS was to identify the most important roles and attributes from a South African perspective and was met with a varied degree of consensus.

The respondents who were invited to participate in the ROS had diverse backgrounds and represented the private healthcare sector, the public healthcare sector and the higher education sector. The public and private health sectors have different expectations and demands on professional nurses and allow various degrees of responsibility and accountability. This may have impacted on how they ranked their roles and attributes for their speciality. Further, in South Africa, the nursing profession, roles are assigned to a specific person and are not automatically linked to a qualification or expertise, but rather to the job description or requirements of the employer. This is no different in the international context as illustrated by Baldwin *et al.* (2012) who found the APN performed their roles in relation to the service needs and work patterns which determine their activities. Chapter 3 revealed how nurses in the international context enacted their APN role according to the practice environment demands and identified the mismatch between the roles and the actual job content, highlighting how the APNs spend their time across the practice domains of APN (Chang *et al.*, 2012; Lowe *et al.*, 2012; Roche *et al.*, 2013 and McKenna *et al.*, 2015). A possible explanation of why the rank ordering of the roles and attributes is not clear cut might be because the job functions are designed to specific person's experience regardless of their qualification and the domains of practice.

Nursing is viewed by the profession as a practice discipline with the main focus being on clinical related tasks. This is seen in the role identified in the ROS as the most important, namely, expert with a close second being the role of clinician placing an emphasis on the ability to provide appropriate care. The literature supports this notion as the APN was found to spend more time in the clinical practice domain than for instance in the research or professional leadership domains (Begley *et al.*, 2012; Elliot *et al.*, 2012; Bryant-Lukosius *et al.*, 2016 and Defenbaugh *et al.*, 2016). Therefore, the rank ordering outcomes might be influenced by the respondents' own ability, preference and competency level and not necessarily aligned to what is required from a specialist nurse. This might explain why the role of administrator, although important, was ranked consistently as the least important role, either due to a lack of interest in performing administrative tasks, or because it is seen as part of total patient care and not a stand-alone role.

Another aspect complicating the rank ordering of the roles and attributes was the respondents' understanding of the specific role or attribute. This aspect has been reported in the literature not only in terms of the expectation of the role of APN but also around the understanding of the terminology. The identified roles and attributes from the scoping review (Chapter 3) is context dependent and might have be viewed by the respondents as interrelated or similar in definition. Feedback from the respondents was that they found it difficult to complete the ROS as some items are equally important yet only one rank could be assigned to an item and this caused internal conflict as to which item they valued more than the other. The internal conflict displayed by the respondents indicated the emphasis of personal preference and ability rather than what is needed for a professional nurse to function in a specific nursing speciality.

The summary scores were very close to one another and complicated the decision of which of these should be considered for inclusion in a course for APN. It is clear from the results of the ROS that the respondents had different starting points and valued different aspects of the roles and attributes of specialist nurses. It was therefore necessary to try to gain consensus on what aspects should be included in the course for APN by having a discussion to clarify terms and to identify content from the same starting point. The results of the ROS were therefore presented at a nominal group to achieve this objective.

4.3. Nominal Group

Varga-Atkins *et al.* (2017) defines the nominal group technique as a structured method to achieve group consensus following coordinated steps resulting in an action plan. This

method was chosen as the next step in this study to identify and formulate concepts for the development of the course for APN.

4.3.1. Procedure

The researcher followed a modified nominal group technique as described by McMillan *et al.* (2016) to gain consensus from the participants. The steps followed are illustrated in figure 4.14.

The participants were invited to a half-day session to reach consensus on the concepts to be included in the course for APN. As explained in Chapter 2, each participant received an information sheet upon arrival and was requested to sign a consent form to be audio recorded.

The session was introduced by the researcher, who facilitated the process, providing an overview on the purpose of the nominal group discussion as well as the structure to be followed.

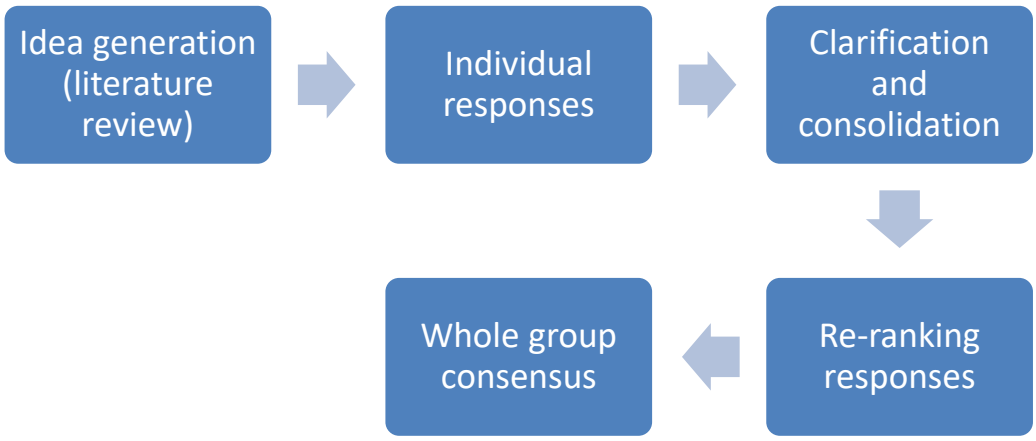

Figure 4.14 Adapted nominal group technique process

On initiating the discussion, background information was provided to the group on the changes in nursing education in South Africa, specifically around the new qualifications to be introduced in 2020. The qualification applicable to this session, namely the postgraduate diploma for specialist nursing, was explained within the South African context indicating how the SANC views APN as inclusive of specialist nurses and advanced practice nurses. The participants raised concerns around the definition of a specialist nurse and, in order to obtain meaningful discussion and input from the participants, the facilitator first clarified the following aspects:

- Both a specialist nurse and an advanced nurse practitioner are viewed, from an international and national perspective, as Advanced Practice Nurses (APN). Both are involved in advancing the practice domain and should have expert knowledge around their field of nursing. The differentiation between the two (2) categories is in relation to the practice setting. A clinical nurse specialist is traditionally located in a clinical setting such as a hospital whereas the advanced nurse practitioner takes on more of a consultancy role in their own practices.

- There is a misunderstanding around the level of the new nursing qualifications in relation to the qualification alignment to the National Qualifications Framework (NQF). Up to 2019 professional nurses could either do a diploma in advanced nursing on NQF level 7 or a clinical master's degree at a NQF level 9 in a specific nursing speciality. The route to become a clinical specialist nurse (APN), in South Africa will, from 2020, require the professional nurse to do a postgraduate diploma in a specific nursing speciality on a NQF level 8 and does not provide for the two streams of career advancement any longer.

The purpose of the discussion was to determine the key concepts for a course: Scholarship for APN, which will form part of the new postgraduate diploma for clinical specialist nurses. The definition of scholarship (Chapter 1) was given to the group and the facilitator highlighted that the course being developed will cover non-clinical aspects of becoming an APN. The clinical skills and expert knowledge will be presented in other courses as part of the postgraduate diploma programme.

Finally, the results of the preceding phases of the study to this nominal group discussion were presented and explained as well as how the results from the scoping review and rank order scale were used to generate ideas.

4.3.1.1. Step 1: Idea generation

Ideas for consensus decisions were generated in Chapter 3 (Scoping Review) and in the Rank Order Scale (ROS). According to McMillan *et al.* (2016) using explorative measures such as a literature review allows for greater consultation than the "silent generation of ideas" of the traditional nominal group. Each participant received a list with the identified roles of APN; the attributes of APN and the related tasks for their consideration in step 2 and the subsequent steps of the nominal group discussion.

The facilitator elaborated on the findings of the scoping review (table 4.3) and rank order scale (table 4.4) stating the top ten (10) ranked roles for each. The results of both illustrated a need for recognising and characterising the important roles for the South African context.

Table 4.3 Summary of results of top ten roles identified in the scoping review

Role	Number of articles
Administrator/Manager	9
Mentor / Coach	11
Coordinator	11
Change agent	13
Consultant	14
Communicator	18
Collaborator	18
Leader (professional / clinical)	18
Researcher	18
Educator	23

Table 4.4 Summary of results of top ten roles identified in the Rank Order Scale

Role	Ranked position
Communicator	**10th**
Coordinator	**9th**
Mentor / coach	**8th**
Researcher	**7th**
Consultant	**6th**
Role Model	**5th**
Educator	**4th**
Leader	**3rd**
Clinician	**2nd**
Expert	**1st**

4.3.1.2. *Step 2: Individual responses*

The question: “What are the most important roles of an APN that should be included in a course to develop an APN?” was posed to the participants.

Time was given for them to reflect on what they consider to be important for them as an individual, and also for their nursing speciality. Each participant received coloured cards and a marker and was asked to write one role on each card together with a short motivation of why this is an important role on the back of the card. Participants could choose from the list provided or generate any other role they felt was important.

Once each idea was generated the participants were requested to post their cards randomly on the wall.

The roles identified in the individual responses are illustrated in figure 4.15 and show the identification of eleven (11) roles as they appear from the list provided and two (2) additional ideas that were not included on the list.

Figure 4.15 Roles identified in the individual responses

This set the scene for the next step of the process namely to clarify and cluster the roles.

4.3.1.3. *Step 3: Clarification and consolidation*

This step provided an opportunity for clarification and clustering of ideas. The cards with the same idea were grouped together for example the five (5) cards with clinician written on it was grouped together. For clarification purposes the facilitator read the motivation on the back of the cards when a specific role was discussed and the participants were requested to consider what the role was and how it would apply to the APN in practice. It became clear from the onset that each role had to be clarified first to gather the common understanding of

each role by the participants to enable the clustering of ideas. As participant (P2) rightly commented: *"I think it would be interesting to know what we all see as a clinician, as a leader as a researcher, what is her role going to be?"* This was supported by participant (P5) saying: "*there's a few of them that you can probably put together*" and participant (P3) saying "*but I am sure there's different interpretations*" illustrating the need for a common understanding of the roles within each discipline. The decisions of clustering the cards were then based on agreement of all participants.

Cluster 1: (figure 4.16)

The facilitator asked the question: "what roles could or should be joined together?" which initiated the first clustering of the roles around that of a clinician.

P5, P6 and P3 immediately grouped the roles of clinician, expert and consultant together which was supported by the remaining participants after explaining how these roles are interlinked as explained by P9 who stated: "*The clinician should be an expert with a higher knowledge level, clinically competent to be a resource to peers, patients and family in the role of consultant."*

The role of manager was added, as P3 explained her motivation for inclusion of this role: "[…] *the manager is about managing care; it can also go under clinician*", and P6: *"… a clinician must be able to a mange the unit as well as the patients"* and P8: *"so the manager coordinates care and specialist unit to ensure a good quality care communication and relationships."*

Decisions were made around being an 'expert', a 'consultant' and 'manager' as part of the clinician's role. The clinician should have attributes such as problems solving, critical thinking, clinical reasoning, clinical judgments, and diagnostic reasoning as being overarching all specialities. The participants agreed an expert is defined as having a higher level of knowledge, explicitly linked to the speciality, whereas a consultant was defined as being a resource to other nurses, health care professionals, patients and their family and the manager whose responsibility is to coordinate care.

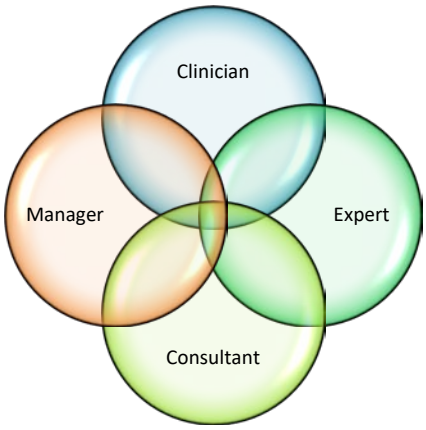

Figure 4.16 Cluster 1 – The Clinician

Cluster 2: (figure 4.17)

The discussion moved onto the role of leader and the question was asked by the facilitator: *"How do we see the role of leader amongst the nursing specialities?"* P5 suggested including the concept 'change agent': "*the definition of leader is influencing people to change and follow(ing) a specific vision which is in line with being a change agent*". The facilitator then read the motivations from the 'change agent' cards: "*when you are a change agent you encourage others to be as effective in their role*" and *"someone who is prepared to change, refine their practice and belief systems"* which is in line with being a leader. The role of change agent as being part of leadership was further rationalised by P8: *"being a change agent is being a leader because a change agent is not accepting the status quo but challenge it rather"* and P4: *"… you cannot be a change agent unless you are a leader."* The level of influence was described by P6: "*A change agent is taking new things and implementing it and it's also about how you influence policy for example, I mean at a specialist level people have to be able to influence policy not only influence but interpret and implement policy*". This linked into the role of 'standard setter' where P3 stated: "*professional standard setter reflect(s) the image of the profession at its highest level to influence the perception of the community about the profession."*

The group consensus was to cluster the roles of 'leader', 'change agent' and 'standard-setter' together as they had similar interpretations or applications in practice.

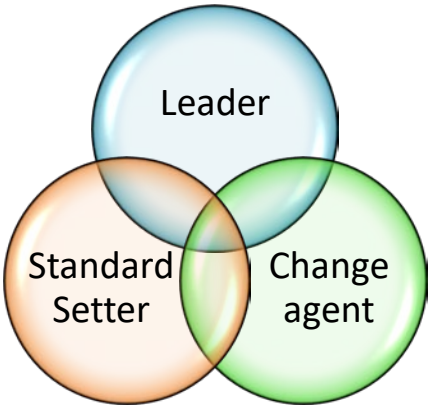

Figure 4.17 Cluster 2 – The Leader

Cluster 3: (figure 4.18)

The discussion moved to the role of researcher, and the facilitator posed the question: *"what is your understanding of the role of researcher - specifically for the specialist nurse?"* P2 mentioned the term 'evidence-based practitioner' and stated it was important to clarify what is a researcher and what is an evidence-based practitioner. P3 said : "*The researcher is someone who is not necessarily someone who does research […] but someone who is aware of research how to use, how to access research and how to assess what they're reading and then how to implement it."* Although P5 agreed with P3 she presented an alternative in stating: "*I'm not convinced conducting clinical research forms part of their portfolio, but I agree 100% with P3 that they must have knowledge around how to access, interpret and evaluate research and use it as a resource. Maybe you should change it to be more about evidence-based practice rather than researcher*".

Consensus was reached that both aspects are important and there are two streams namely conducting clinical research and using evidence-based knowledge.

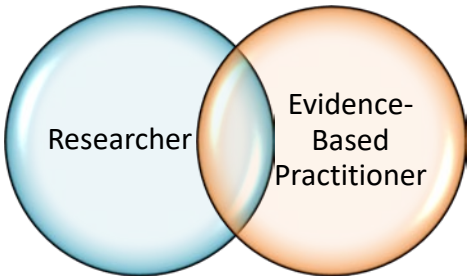

Figure 4.18 Cluster 3 – The Researcher

Cluster 4: (figure 4.19)

The fourth cluster included a discussion around the role of communicator and P6 stated: *"I think collaborator and communicator goes together quite a bit, because I mean to collaborate properly you have to be able to communicate with everyone".* The facilitator read the motivations on the back of the cards of communicator and collaborator and this reflected the role of the nurse within the multidisciplinary team, care coordination and being an expert. P7 stated: "*You can't do any of that without being able to communicate"* which was supported by P5: *"Because you have to be able to communicate with the rest of the team but I think collaboration includes the ability to communicate with more than just the multidisciplinary team it also includes the family, the patient and the community*".

The participants were in agreement that these two roles were interlinked.

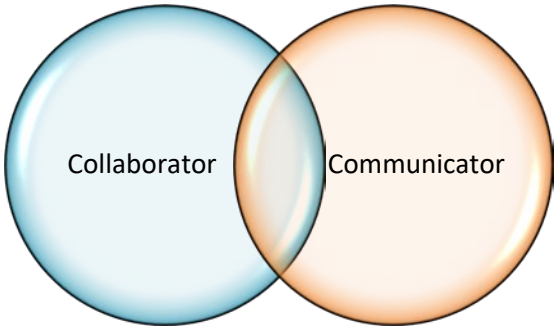

Figure 4.19 Cluster 4 – The Collaborator

Cluster 5: (figure 4.20)

The remaining roles of educator, mentor and coach were discussed. The facilitator asked if these roles belong together and P7 responded: *"No they are not, you'd be teaching, you'd be mentoring, and you'd be coaching. This is not happening in practice because people don't know what it is."* Trying to differentiate between the roles P3 offered: "*Is coach and coaching not actually I want you to be able to do something very specifically, so I coach you. Which is quite specific."* And was supported by P7: "*You could grow into coaching and it goes together with role modelling. Mentoring is actually when I said I need somebody to mentor me and I make a decision who's my mentor."* P9 added: *"When you coach somebody, they already know how to do it you're just making them become more skilful and so on. You're more in a support role as a mentor.*"

It was agreed by all participants that these roles of educator, mentoring and coaching or role modelling forms part of the educator role of the specialist nurse.

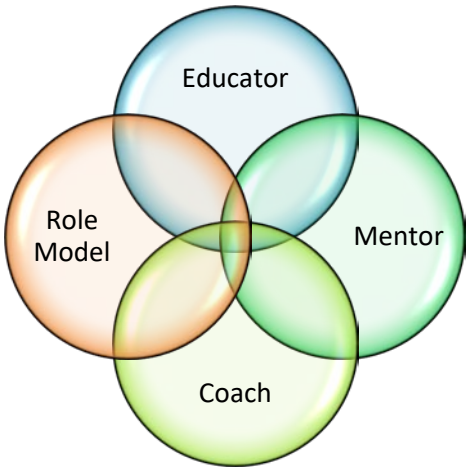

Figure 4.20 Cluster 5 – The Educator

4.3.1.4. Step 4: Re-ranking responses

This step can take on many formats (McMillan *et al.*, 2016), however this was not required in this process as there were general consensus of the top five roles (figure 4.21) to be included in the course for APN. These principal roles formed the basis for the next step namely discussing each role to clarify the meaning of each and identify concepts for inclusion in the Scholarship course for APN.

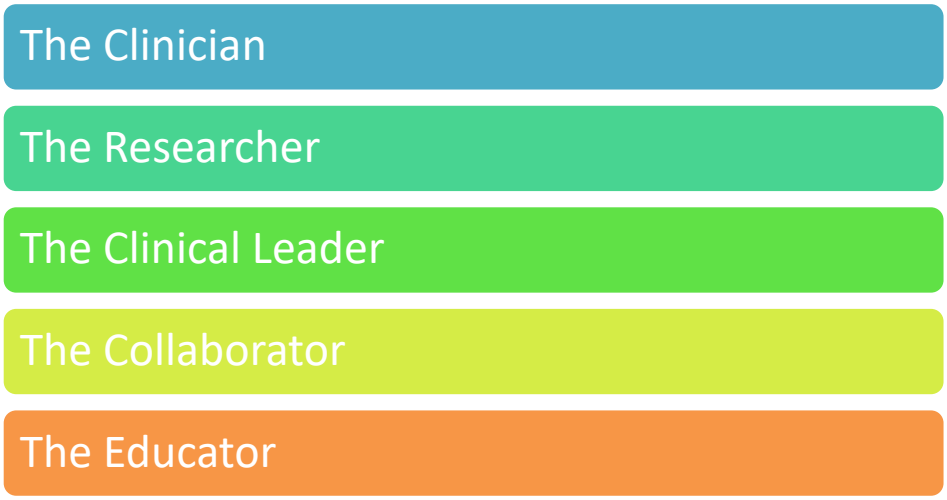

Figure 4.21 Five principle roles

4.3.1.5. Step 5: Whole group discussion

Once the cards were grouped into the five (5) principal roles the discussion shifted to what each role entails, and the participants were asked to consider the main attributes and key features of each of the identified roles. Each participant was provided with blue coloured

cards to capture the key features or functions of the role and pink coloured cards for the attributes or key terms associated with the role. Once the cards were posted on the wall for a specific role, each aspect captured was deliberated upon until consensus on key aspects to be included in the course development was achieved. The same process was followed as in step 3 where participants were afforded an opportunity to clarify their ideas during the discussion. This process was repeated five (5) times starting with the clinician. Once consensus was reached the conversation moved to the next role and the process of writing the cards followed by the discussion was repeated until all the roles were covered.

Clinician

The first role for deliberation was that of clinician. The characteristic features identified by the participants for clinician included: *expert knowledge and skills; clinical judgement; critical thinking; problem solving; decision making; organisational skills; independent; ethical; accountable; advocacy; reasoning; resourceful; approachable; competent skilled safe practitioner; accessible to others; autonomous practice.* Figure 4.22 represents the collated ideas of the group.

The facilitator read all the ideas written on the cards and the group wanted clarity on the meaning of *organisational skills* to which P3 stated: "*I put it as methodological and it's actually working logically*", and P8 added: "*Working according to what they have to do within the timeframe they have; following the nursing process to organising their workflow.*" The group agreed that the manager role is part of being a clinician as discussed previously and therefore it makes sense to have some level of organisational skills as explained.

Another uncertainty was around the differentiation between independent and autonomous practice. There are different views on what these terms means as shown by P7 who said: "*Autonomy means you have your own practice and independent means you work alone*" upon which P5 responded: "*I think there is a difference between autonomy and independent practice because independent practice refers to the fact that I'm accountable for my own actions whereas autonomous refers to having the authority to make decisions about patient care*." A discussion ensued bringing in the various contexts professional nurses work in such as primary healthcare and midwifery although guided by the ethical-legal framework they have essentially their own practice which validates P7's definition or understanding of the two terms. However, the question arose as to how it relates to the broader nursing community. P6 responded by saying: "*Ethical-legal framework comes in here as well, when you consult with a patient you need consent as well as the agreement on the quality of care the patient receives.*" P4 added: "*Also under the legal framework is what a person is supposed to be doing in the clinical area, like a guide to be a clinician*."

The group confirmed in relation to APN, that irrespective of your setting you have a certain degree, guided by the ethical-legal framework, of autonomy around having the authority to make decisions and taking responsibility for those decisions, whereas being independent implies the APN is accountable for his/her individual actions even as part of a team the APN is accountable for his/her actions within the team.

The other characteristics captured were seen by the group as important and all concurred on their understanding thereof. The conversation moved to how to integrate these characteristics in the development of a course for APN and emphasised that, although the professional nurse will gain expert knowledge in a specific speciality, he/she is still a clinician and being a clinician it is important to remember that it is a professional role, irrespective of the speciality. The speciality only determines the knowledge base and skill competence the person will possess. However, an overarching consideration is the application of ethical principles within the legal framework; having the ability to act autonomously and independently applying critical thinking and diagnostic reasoning when consulting, managing and caring for patients, families, other healthcare professionals and peers.

The course for APN should therefore enable the professional nurse to become confident and competent in the role of APN to meet practice requirements, and the key features consist of:

- Developing a work ethic within the legal framework of APN that will instil trust in the person and in the profession.
- Internalising attributes such as autonomy, independence, critical thinking, diagnostic reasoning, and advocacy to build confidence and competence.
- Mastering the skills of problem-solving and decision-making within the multi-disciplinary team and being able to manage and guide the team to provide holistic care to the patient, family, caregivers, and the community.
- Gaining the expert knowledge in the speciality to become a resource to the multi-disciplinary team and promote the profession.

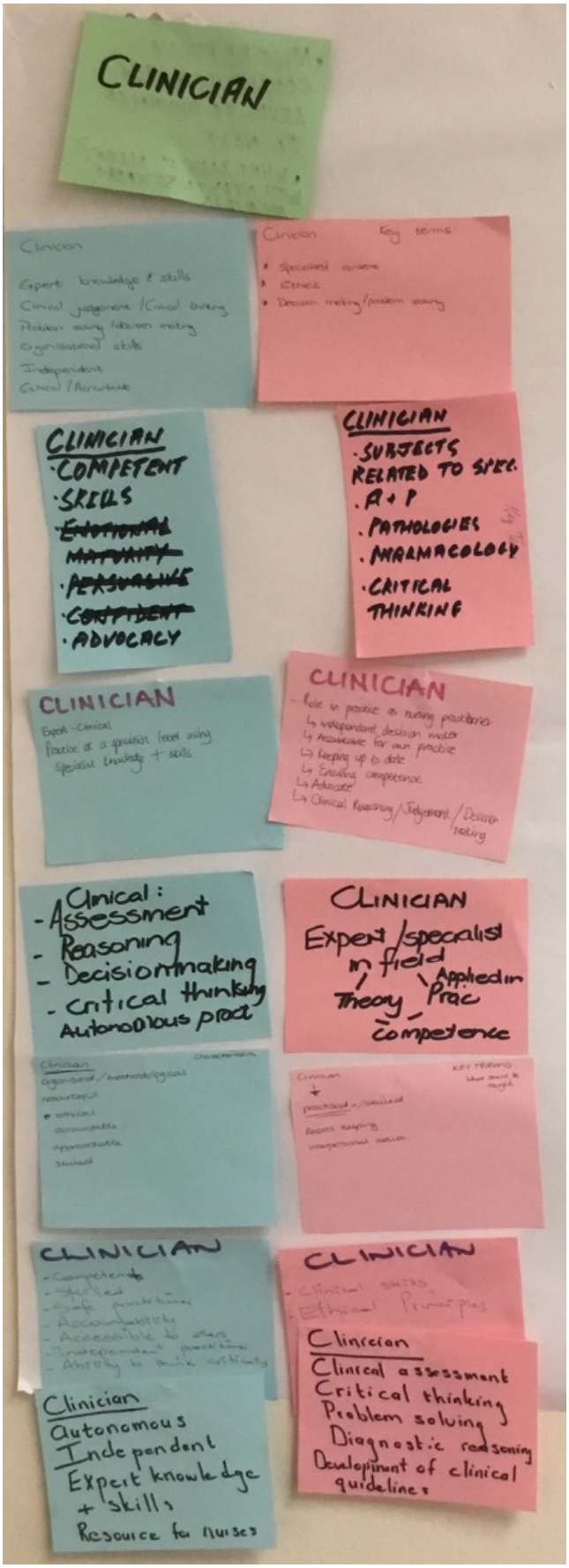

Figure 4.22 Clinician Characteristics

Clinical Leader

The next role discussed was that of the leader and the key features highlighted were: *emotional intelligence; resilience; communication; challenge the status quo; self-mastery; influential; mentor; role-model; governance; policy interpretation and implementation; change agent; advocate; quality assurance; take responsibility; respected; accountable; approachable; visionary; persuasive; confident; credible; innovative; creative; decisive; self-leadership.* The collated ideas of the participants are displayed in figure 4.23.

After the facilitator read the contributions on the cards, P2 commented: "*It's interesting because a lot of that also seems to be fitting under collaborator*" which set off a discussion around should "leader" be a stand-alone concept or an overarching idea included in all the concepts, to which P5 responded: "*It has to be a concept on its own, because like I say just from the fact that it's not understood properly; if it is not actually focus(ed) on, it will be very difficult to enact.*" This brought about the next question namely, what type of leader or leadership we are referring to or do we expect from an APN? As P6 explained: "*When we talk about leadership, there's clinical leadership or professional leadership. I didn't pick up anything about professional leadership. I personally believe this is a very important leadership development opportunity*."

The attention of the group was drawn to the blue coloured cards which depicted the key characteristics associated with the role of leader. The facilitator asked the question, if we have to formulate a definition of a leader what will it say? P5 responded: "*If someone is able to use all these skills and attributes to bring about change that's generally what a definition of a leader is*." The focus moved towards the leader's ability to bring about change which was accepted by the group that one of the attributes of a leader should be the ability to bring about change in the practice environment. However, it did not answer the question of what type of leader the group was referring to.

P7 then added: "*I think you're really looking at somebody who can lead a team and that's clinical, but you also looking for a leader who can take responsibility in the profession*." P6 suggested that in order to be recognised as a leader, you need clinical expertise which might not be linked to time spent in a particular field but rather to the exposure to opportunities to develop and grow and gain experience.

The discussion moved to how would a professional nurse enacts her role as a leader in the clinical practice setting, "*The clinical specialist should be taking their team and taking things forward"* (P3) and P2 said: *"… if you are a leader on a ward level you apply your leadership skills on how policy is interpreted and acted out."*

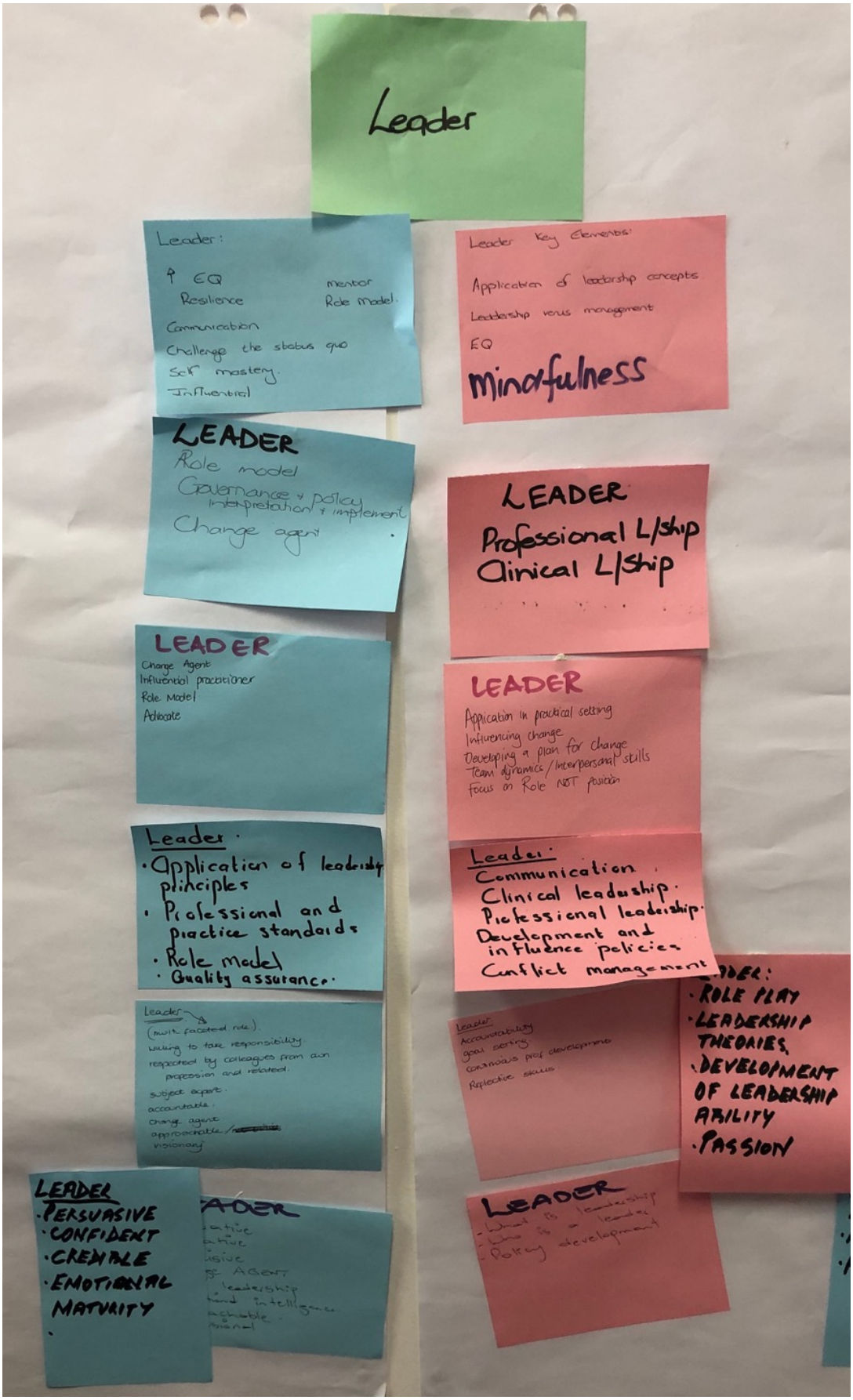
Leader
Leader:
EQ
Resilience
mentor
Role model.
Communication
Challenge the status quo
Self mastery.
Influential
Leader Key Elements:
Application of leadership concepts
Leadership versus management
EQ
Mindfulness
LEADER
Role model
Governance & policy interpretation & implement
Change agent
LEADER
Professional L/ship
Clinical L/ship
LEADER
Change Agent
Influential practitioner
Role Model
Advocate
LEADER
Application in practical setting
Influencing change
Developing a plan for change
Team dynamics / Interpersonal skills
Focus on Role NOT position
Leader:
• Application of leadership principles
• Professional and practice standards
• Role model
• Quality assurance.
Leader:
Communication
Clinical leadership.
Professional leadership.
Development and influence policies
Conflict management
Leader
(multi facetted role).
willing to take responsibility
respected by colleagues from own profession and related.
subject expert.
accountable.
Change agent
approachable
visionary
Leader:
Accountability
goal setting
Continuous prof development
Reflective skills
• ROLE PLAY
• LEADERSHIP THEORIES
• DEVELOPMENT OF LEADERSHIP ABILITY
• PASSION
LEADER
• PERSUASIVE
• CONFIDENT
• CREDIBLE
• EMOTIONAL MATURITY
LEADER

Figure 4.23 Clinical Leader Characteristics

The debate around the type of leadership was useful as it touched on many aspects that should be included in a course for APN to prepare them for their leadership role. It was evident the leadership role referred to by the participants leaned towards the clinical leadership side with P9 stating: "*So you've got clinical leadership and then you've got your overarching leadership principles and characteristics which will determine how you will define clinical leadership*".

It was emphasised in the discussion surrounding the concept of leader that the role should be called 'clinical leader' and the course being developed should focus on preparing the APN to be influential, be a change agent, an advocate for the patient but also for the profession and a team player.

The concept of clinical leader should include the following elements listed below:

- The ability to influence clinical practice on a systems and policy making level to advance practice, attain and maintain a productive environment that provides safe and excellent care.
- Quality patient care which is reliant on attributes such as social and emotional intelligence to empower healthcare professionals, patients and their family and the community at large.
- Self-confidence to adopt the responsibility of empowering groups and instils confidence in patients and team members and collaboratively bring about change based on ethical judgements and shared decision making.
- The ability to advocate to support the patient, professional team members and the community.
- The ability to assimilate the characteristics of innovation, commitment, collaboration and communication by developing their own style of clinical leadership which embrace all the above.

Researcher Practitioner

The facilitator read the characteristics captured on the cards (figure 4.24) which was followed by a discussion on the role of researcher which included: *developing a body of knowledge; application in practice; evidence-based practitioner; participating in research; interpretation and application of research; access, assess and apply; enquiring mind.*

The discussion was focussed around the expectation of the clinical specialist regarding research as P4 stated: "*When you are a specialist you don't just continue practising without*

reading more and when you see things in the clinical (area) you want to know what is happening so it relates to evidence-based practice". The group discussed the educational level of the qualification and what is expected of them in relation to research and was confirmed by the facilitator they have to be involved with research but don't necessarily have to conduct research.

It was important to clarify what the group expected from APN in the clinical setting as P6 stated: "*You have touched on two things now, one is you said what must she be able to do when she's finished (training) as a clinician (APN) and what's she is doing in practice. I don't think she can finish her training at a postgrad level without research. But is she going to do it in practice, I think she will participate in research and practice and use evidence-based practice."* Which was confirmed by P4: "*they're two separate things an evidence-based practitioner and a researcher. A researcher is more like an academic and* ..." P5 completed the sentence: *"… evidence-based practitioner is using research."*

The group was reminded by the facilitator that the aim is to prepare an APN to fulfil his/her role in practice, so the question is what do we expect the APN to do in practice? The term clinical researcher was considered by the group. However, they felt it was not only about conducting clinical research (P3). The term 'Research Practitioner' was then introduced by P2 and found resonance by the group. The researcher role was then changed to '*The Research Practitioner*'. This term encompasses the active engagement in activities linked to their expertise and usage of knowledge to improve the profession as well as the systematic gathering and application of information to solve problems or introduce new processes or techniques. The term 'research practitioner' described what the APN should do in the practice setting and there was general agreement that, as everyone had written similar ideas on the cards, there was consensus on what the APN should know:

- How to gather and appraise literature: access relevant literature from research databases; appraise the literature based on the level of evidence which will guide the assessment of the literature's appropriateness.
- How to use evidence: understand the research processes in relation to the research designs and methods, principles of ethics and validity and reliability; developing strategies and tools for evidence-based practice to improve the quality of care.
- How to disseminate findings: knowledge of the platforms for sharing findings and using the evidence to develop the person, the profession and the environment.

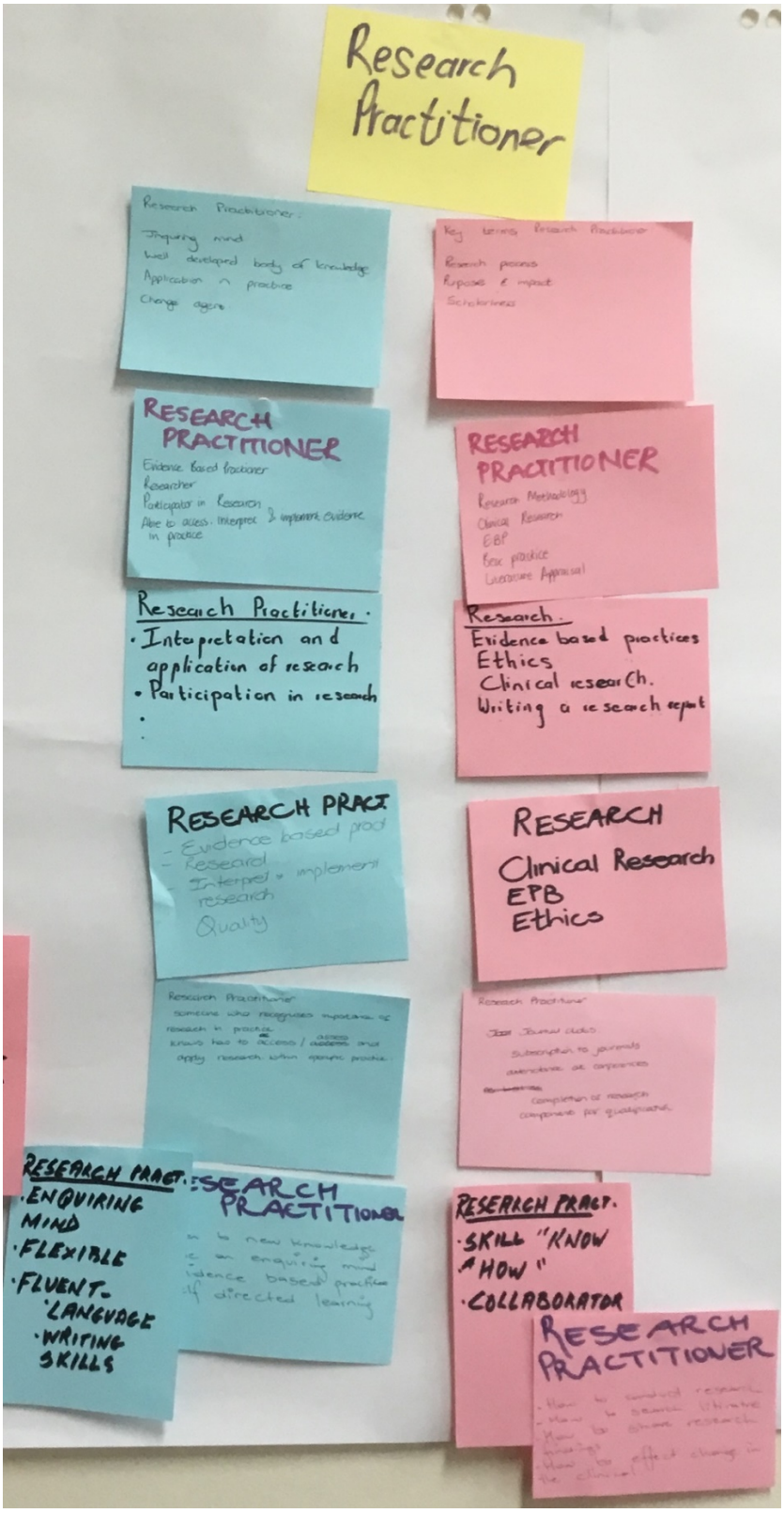

Figure 4.24 Research Practitioner Characteristics

Collaborator

The facilitator read all the cards posted on the wall and P2 stated: "*I think that one at the bottom summarises what it is to be a collaborator.*" The card being referred to (figure 4.25) reads: *Someone who recognises their role in the care of a patient and is also aware of the role and importance of the other stakeholders and works with them all (not just the health professional) to provide optimum care to the patient. Someone who makes effective use of all resources available to provide optimal care.*

The other ideas captured included: *relationship building; advocacy; inter-professional collaboration; community outreach; coordination of care; communication; teamwork; team coordinator; awareness of healthcare, professional team and role of each including families, society and patient's live how to engage meaningfully with all people and resources at their disposal.*

The mention of coordination of care and the inter-professional team triggered the participants to elaborate a bit more on the importance of these two aspects. P5 stated: "*I think a key thing with the inter-disciplinary team is coordination of care because I think it's something that we don't employ in South Africa, yet overseas you see how the nurse is the care coordinator or the link between the other disciplines which allows for you to have continuity of care, holistic care which is something we don't have here we have a very isolated disciplines.*" P9 supported this by adding: "*We should have a coordinator in the multidisciplinary team who can connect the dots not just a person who is a passive transfer of information but who is actively involved in the decision making process*". P8 added: "*A person who is a lynchpin of healthcare*".

P6 expressed the opinion that the processes used in collaboration and coordination functions are related to the human rights and the ethical-legal framework we work in. This was supported by P3 stating: *"It also requires the collaborator to have some knowledge into policy development, regulations and how it impacts on the functions of the team."* Upon which P5 replied: "*As the coordinator you also need to have a clear understanding of each member's role, have some knowledge into the other disciplines.*"

The summary of the role collaborator should include elements such as: shared values and ethics; roles and responsibilities; establishing partnerships; inter-professional communication; and interact holistically, authentically and supportive to the patient, family and other healthcare professionals.

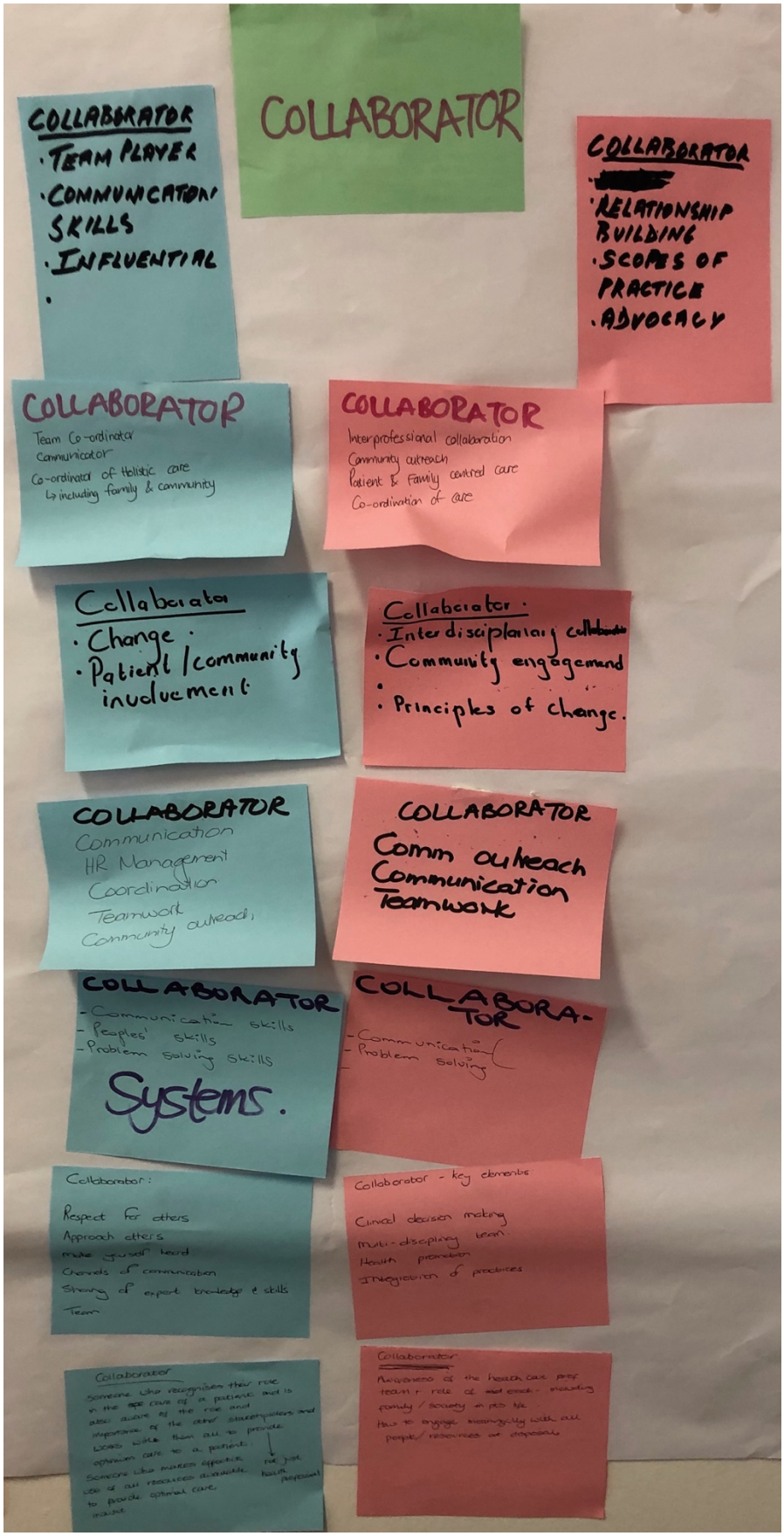

Figure 4.25 Collaborator Characteristics

Professional Development

The last area to discuss were around the role of the educator. Other elements included were those of role model and coach and mentor. The APN is required to inspire, motivate and guide people to reach their potential and although this might be part of leadership, how it is done falls under the elements of education. P2 asked: "*Isn't what we're talking about more to do with professional development and facilitating professional development?*" P8 responded: "*Educating, mentoring and coaching links up with leadership but also your self-management and your self-development, professional development*." P6 added: "*It is professional development of the self and of others.*" The group decided that it would be preferable to refer to all these aspects under education as 'professional development' which includes components of how the APN will share his/her knowledge to develop the person, the profession and the practice.

Once the theme of professional development was clarified the participants completed their cards on the characteristics of professional development and can be seen in figure 4.26.

The characteristics captured on the cards included: *mentor; coach; policy influencer; source of information; educator; role-model; self-mastery; leader; influential; goal setting; reflective; inclusive; legal-framework; emotional intelligence; conflict management; resilience; continuous development; knowledge; changes in practice environment; personal philosophy and responsibility to profession.*

Participant 5 shared an insight: "*I have just realised something important, something they (professional nurses) lack, that I think I would have put if I thought about it, was the personal philosophy values, personal values, personal ethics and I think that that's important for professional development." She* continued saying: "*we don't have an idea on how to incorporate our own values into our practice"*. P8 responded: *"they say you mustn't allow any of your beliefs and your values influence your practice and therefore students don't know how to incorporate their own values and lesson to the practice and this leaves very conflicted professionals"*. To which P9 said: "*Causing ethical distress or moral distress*".

It was recognised by the group that most of the thoughts captured by the group were repetitive and what stood out and what everyone agreed to was that the value system was an important aspect. P4 also noted: *"It is important for a person to have a value system and a personal philosophy but they should remember it can change as you grow and it will not change if people don't challenge you and you won't adapt or grow"*.

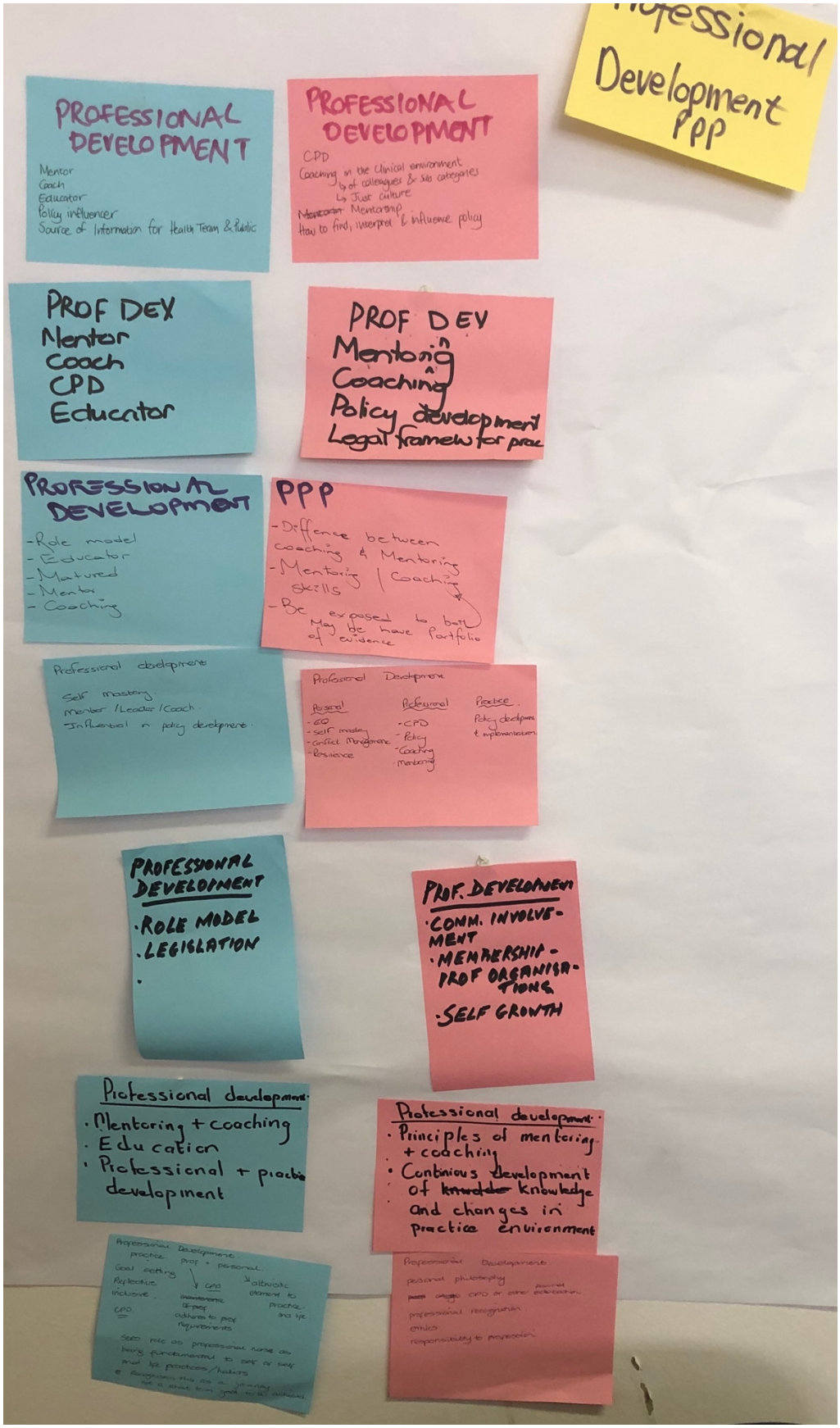

Figure 4.26 Professional Development Characteristics

The concept of professional development encapsulates three areas namely:

- Personal development: having a value-system with the focus on lifelong learning to become a reflective practitioner. Having the resilience to affect change within the self but also in the profession. Being motivated to influence others to become a better version of themselves.

- Professional development: using the tools of education, mentoring and coaching to develop other healthcare professionals in the team to advance their career, but also to influence policy makers to better the standards of care and the nursing profession at large.

- Practice development: using principles of shared governance to improve the quality of care, operating within the legal framework to develop policies for the advancement of the profession and the practice environment.

A working definition of professional development was pieced together to guide the development of the course for APN:

Professional development is a continuous process of improvement and methods that are used to address quality of care and to advance healthcare practices. Emancipatory practice development is a sustainable transformational process that brings about change in the healthcare providers, clinical practice as well as patient outcomes. Healthcare teams develop their knowledge and skills and transform the context of care as well as the culture. This process is enabled by facilitators who brings about the change; they are system thinkers that influence and support sustainable change by demonstrating the impact and value of innovation and the implementation of evidence in practice.

4.3.2. Concluding the nominal group

A summary document consisting of a definition, key terms and scope of each concept which was compiled by the researcher based on the discussions, and shared via email with the participants for comment. The participants accepted the summary document with one addition of self-awareness to feature in the clinical leadership concept.

As a next step the summary document was presented to the postgraduate curriculum committee of the nursing department at the research setting for comment and the committee endorsed the concepts unanimously.

4.3.3. Discussion

The nominal group discussion was held to gain consensus around the identification and clarification of concepts for the course on scholarship for APN. The individuals who participated in the group had a wide range of experience and expertise and made valuable contributions. The objective was met with the identification of five (5) concepts for further development.

Advanced Practice Nursing (APN) is focussed around a central competency namely direct clinical practice, which is encapsulated in the concept of clinician, yet, for the purpose of the course being develop on scholarship, the participants acknowledged the necessity for the APN to have an expert knowledge base and advanced skills competencies, however, the emphasis of this concept lies in the developing the professional to gain the additional competencies an APN needs to deliver quality care.

It is note-worthy that despite participants expressing views based on their own experiences there is alignment between their contributions and that of the additional competencies identified by Hamric *et al.* (2014). Hamric *et al.* (2014) had reviewed the various conceptual models on APN and identified '*guidance and coaching*'; '*consultation*'; '*evidence-based practice*'; '*leadership*'; '*collaboration*' and '*ethical decision making*' as additional competencies essential for an APN to be successful. All of these are embodied in the concepts developed by the nominal group.

Table 4.5 below shows the comparison between the practice domains identified in the international literature (The Strong Model), the SANC APN framework and the nominal group findings.

Table 4.5 Comparison between The Strong Model (International); SANC - APN Framework (SA) and Developed Concepts (Nominal Group)

	The Strong Model	SANC - APN Framework	Concepts Nominal Group
Domains of Practice	**Direct comprehensive care**	**Care provision and management**	**The clinician**
	Client focused activities performed by the APN including a range of assessments, interventions, procedures, investigations, interpretations of clinical data and case management of the complicated and ill patient.	Focus on competencies such as health promotion, assessment, planning, implementation, evaluation whilst maintaining a therapeutic relationship and communication	Being an expert in their field of speciality. Having the competence and clinical skills on an advanced level. Decision-making skills, autonomy, independence and accountable.
	Research	**Research**	**Research Practitioner**
	Incorporating evidence-based practice that challenges the status-quo, seeking improved direct patient care through scientific inquiry. Focus on the understanding and usage of evidence.	Initiates and conducts research to inform practice in the area of speciality. Analyse and evaluate evidence for implementation in clinical settings.	Have the ability to gather and appraise evidence and apply evidence in practice settings. Apply evidence-based practice principles to improve the quality of care.
	Support of systems	**Professional development and quality of care**	**Collaboration**
	Professional contributions to quality initiatives optimizing nursing practice within the practice setting. Indirect patient care activities such as consultation and collaboration with multidisciplinary team to improve the quality of care.	Promotes and disseminate practice standards to improve quality of care. Undertake continuing development of self and other professionals through collaborative activities such as multi-disciplinary teaching and learning.	Apply principles of shared decision-making, and governance within the multi-disciplinary team to ensure optimal patient outcomes. Have a shared valued system respected by all members of the team.
	Education	**Professional, ethical and legal practice**	**Professional development**
	Providing formal and informal education to peers, healthcare professionals, patients and community, contribute to disseminate educational research related to illness, health and wellness.	Accepting accountability and responsibility for own professional actions, participate in improving access to specialist services. Consult, engage and educate nurses, families and community within the ethical and legal framework.	Commit to lifelong learning to affect change in self and others, through coaching and mentoring. Improve quality of care being involved in educational activities disseminate of knowledge
	Publication and professional leadership	**Management and leadership**	**Clinical Leadership**
	Exert influence within and outside the profession and institution. Promote APN role and disseminate expert knowledge to influence policy.	Uses change process to influence practice standards and promote the role of APN on various platforms. Contribute to policy development and lead the implementation of policies in the practice setting.	Ability to influence practice on a systems and policy level. Ability to empower teams and groups to instil confidence in the profession and be an advocate for profession, team and patients.

From an international perspective an overview of the development of APN was provided in Chapter 1 and highlighted a conceptual model, Hamric *et al.* (2014) identified as suitable to guide curricula development for APN, namely The Strong Model with its five (5) practice domains and three (3) unifying threads. Comparing the concepts identified by the nominal group to The Strong Model's practice domains a strong relationship was noted. The unifying threads of scholarship, collaboration and empowerment which underscore The Strong Model (figure 1.3 in Chapter 1), is incorporated into the five (5) identified concepts, as illustrated in table 4.5.

APN is a new category of nurse being introduced in the South African context and the SANC (2014) has provided a framework detailing the practice domains with related competencies to aid the development of APN in South Africa. To date, professional nurses have been able to obtain additional qualifications in various speciality fields without being recognised as a APN and have relied on research activities to establish themselves as experts in the nursing profession. Having professional nurses with additional nursing qualifications in a range of nursing speciality fields with masters and doctoral degrees, suggests we have the skill set to identify requirements to implement APN successfully in South Africa. The table 4.5 shows the alignment of concepts.

4.4. Conclusion

In this chapter the second phase of the design and development process was conducted with identifying the concepts and the scope of each concept. The next chapter will provide detailed information on phase 3, the development of the artefact / prototype.

Chapter 5. Course Development (Phase 3)

5.1. Introduction

This chapter provides the detail on the third phase of the design and development process – the development of a prototype of the artefact.

The development of the prototype was informed by the previous sections of this study providing information on the organisation and structure of content, which formed the foundation of the development of the prototype.

The prototype or artefact being developed in this study, is the Scholarship course for APN following a concept-based approach. Although conceptual learning is not a new phenomenon, it requires a different approach to thinking. This approach has not previously been used in a post-graduate nursing programme in South Africa, so part of the research involved in developing the course was to explore various aspects involved in concept course development. Part of this chapter therefore provides background to understanding conceptual learning in order to ensure it translates into practice in the development of this course.

5.2. Course design

As highlighted in chapters 1 – 4 of this study, it is has become evident that a new approach to teaching and learning is required to prepare nurses, not only to become specialist nurses, but also to be practice-ready and to take on a scholarship role to advance the nursing profession. The teaching approach should not focus on acquiring and applying knowledge as this leads to content overload and regurgitation of information. With the healthcare environment being dynamic and changing rapidly, a teaching approach that is competency-driven, with the main goal of transferring knowledge, is needed to prepare nurses for the realities of various practice settings (Erickson, 2008; Wiggins & McTighe, 2011; Emory, 2014).

Another factor the researcher had to consider during the development process was the choice of the type of curriculum used at the institution. In Chapter 1, it was indicated that the Nursing Education Department at the research setting is moving towards a concept-based curriculum for all their programmes. The concept-based curriculum focuses on big ideas guiding the student to make meaning from experiences and not just teaching

content (Erickson, 2008; Giddens *et al.*, 2020). The benefits of a conceptbased curriculum include the encouragement of elevated levels of thinking; the enablement of effective teaching of skills like clinical reasoning, clinical judgement and problem solving and preparation of students for professional success. All these benefits underscore the value of using a concept-based curriculum in advanced practice nursing programmes (Baron, 2017).

The approach used for the overall design of the course, which incorporates the criteria of preparing students to be practice ready, and uses conceptual learning, was the "Backward Design" as described by Wiggins & McTighe (2005).

5.2.1. Backward design (BD)

The design of curricula starting with learning outcomes is not a new phenomenon and has been explored by various educational theorists such as Bloom (1956) who developed a taxonomy describing setting learning objectives at different levels of knowledge and is classified in three learning domains: cognitive domain, psychomotor domain and affective domain. The focus of Bloom's taxonomy is mainly concerned with content or what students should know, and the related skills as a result of instruction, using performance indicators to determine if goals were achieved (Sideeg, 2016). Anderson and Krathwohl (2009) built on Bloom's original taxonomy suggested changing the nouns used in Bloom to verbs and changed to order of the taxonomy so that the levels are, remember; understand; apply; analyse and create. They also suggested that there are four types of knowledge viz. factual knowledge, conceptual knowledge, procedural knowledge and meta-cognitive knowledge. There has subsequently been some debate (Lindsay & Norman, 1972; Merrill, 1983; Baker & Brown, 1984 and West *et al.*, 1991) as to whether metacognition is a type of knowledge or not and suggested that it is rather a process of thinking.

Gagné and Gagné (1985) in their "conditions of learning" theory, analysed learning outcomes to determine what students would require from learning according to the type of knowledge. Gagné and Gagné identified five categories of learning, viz. verbal information; intellectual skills; cognitive strategies; motor skills and attitudes.

In nursing education, Blooms' taxonomy, and/or the revised taxonomy of Anderson and Krathwohl have been used, and continue to be used, to the exclusion of other approaches and are even used to determine the difficulty level of assessments (Sideeg, 2016). As a

result, educators have been steered to develop learning activities that require the student to represent facts, procedures and skills from memory (Billings & Halstead, 2016).

Backward design (Wiggins *et al*., 2005), on the other hand, proposes a design framework where the focus is not on the content but rather what the students should be able to do ***with*** the content, and how they transfer learning. Backward design differs from other educational theories in they put a greater emphasis on the assessment strategies, and the evidence the student has to provide to indicate achievement of the learning goals. By including elements of constructivism and psychology in Backward design conceptual learning is encouraged and the student is allowed, or encouraged, to construct their own learning through exploring ideas in greater depth to gain understanding of transferrable concepts. This is unlike the traditional teaching methods which, as stated above, emphasise teaching content and preparing students for high stakes assessments resulting in low level deep learning attainment (Wiggins & McTighe, 2011).

Backward Design (BD) involves three (3) stages which guide the course development process:

5.2.1.1. Stage 1: Identify desired results

In this stage learning goals are formulated which are statements describing the knowledge, skills, attitudes and behaviours necessary to perform in a professional context (Wiggins & McTighe, 2011 and Giddens *et al.*, 2020).

Wiggins & McTighe (2011) suggest learning goals should specify what the students will understand, know and do and should reflect the desired forms of student learning, thinking, engagement and behaviour. They propose learning goals to be structured according to three areas:

- Acquire – knowledge and competencies that are important to know and be able to do.
- Make meaning – the big ideas and understandings the student should retain after the course.
- Transfer – apply learning in real life contexts or new situations.

These three (3) areas are incorporated in the eleven steps of Erickson *et al.* (2017) whose section on learning outcomes suggest learning goals should indicate what students should understand (make meaning); what they should be able to do (acquire) and apply in real world situations (transfer). The relevant steps of Erickson are indicated below:

- Step 5: (Generalisations) learning goals to develop and deepen what the student should understand, to make meaning of learning.
- Step 6: (Guiding questions) learning goals related to develop thinking and transfer of learning.
- Step 7: (Critical content) learning goals focussed on content required for long-term results.
- Step 8: (Key skills) learning goals to develop autonomous transfer of learning through authentic performance.

Authors (Giddens & Brady, 2007; Wiggins & McTighe, 2011; Kereluik *et al.*, 2013; Erickson *et al.*, 2017; Giddens *et al.*, 2020) underscore the importance of preparing students for employability and to deepen competencies to meet the expectations of society and the evolving healthcare environment. They further emphasise in conceptual learning or concept-based learning students are actively engaged in the learning and should develop high-order thinking and problem solving skills to enable the transfer of knowledge to manage complex systems, therefore, the learning goals should also include the 21st Century Learning competencies (Kereluik *et al.*, 2013) which are:

- Foundational knowledge (to know) which relates to cross disciplinary knowledge
- Meta knowledge (to act) includes skills such as creativity and innovation; problem solving; critical thinking; communication; collaboration; accessing and analysing information; adaptability.
- Humanistic knowledge (to value) which comprise of life skills; ethical and emotional awareness; cultural competence.

The learning goals for the Scholarship for APN course were derived from multiple sources which gave direction in the formulation thereof. The SANC (2013) published a framework indicating the expected exit level outcomes for APN, and being the regulating authority for nursing in South Africa, represents the requirements and expectations of the Nurse Specialist within the South African context. The researcher also incorporated the findings of the scoping review (Chapter 3) which illustrated the required competencies for the APN from an international perspective. , The Nominal Group discussion (Chapter 4) highlighted the expectations from nursing. The learning goals develop for the Scholarship for APN course will be further discussed in 5.4.3.

Formulating the learning goals give direction to the next stage of the Backward Design, which focuses on assessment activities as evidence of meeting the learning goals.

5.2.1.2. Stage 2: Determine acceptable evidence

In this stage the educator considers assessment and performance tasks (evidence) that will demonstrate achievement or progress towards accomplishing the learning goals or desired results (Wiggins & McTighe, 2011). This stage of Backward design represents the decisions of educators to create opportunities for students to provide evidence of their ability to explain, interpret and apply their learning. (Hansen, 2011; Bowen, 2017 and Erickson *et al.*, 2017). Bowen (2017) suggests the consideration of questions to guide the setting of assessment tasks: "how will I know my students have achieved the desired results?"; "what will I accept as evidence of student understanding and proficiency?" and "does what I assess and how I assess flow from the learning goals?". He further stresses a mismatch between the learning goals and assessment tasks will cause the student to experience frustration and disengage from learning, therefore, assessment should be appropriate and reveal the students' ability to transfer learning (Bowen, 2017 and Erickson *et al.*, 2017).

Performance tasks should therefore be:

- realistically contextualised – providing scenarios to simulate problems that is reflective of the real-world and create opportunities for student to apply learning in context.
- Require judgement and innovation – tasks based on student perspective and experience and allows for independent learning to produce solutions, management of situations and development of different perspectives.
- Multifaceted – integrate discipline relevant content and 21st Century Learning skills and assess the student's ability to use multiple sources of knowledge, skills, attitudes to demonstrate proficiency.

Hansen (2011) encourages the use of the 6 facets of understanding (figure 5.1) (Wiggins *et al*., 2005) as a framework to create appropriate assessment and performance tasks and can be used as formative or summative assessment activities which include:

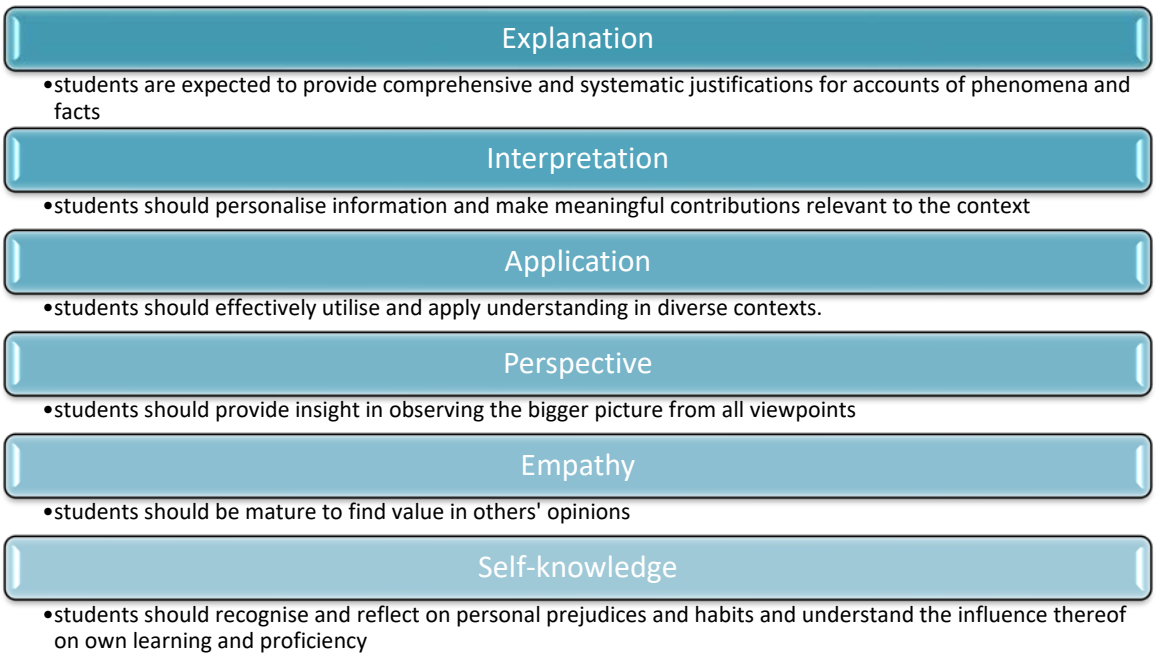

Figure 5.1 Six facets of understanding (Hansen, 2011)

The SANC (2013) in the framework for APN provided with the exit level outcomes a list of associated assessment criteria, which is what Wiggins and McTighe (2011) refer to as performance tasks. To create appropriate assessments for the Scholarship for APN course the researcher incorporated Hansen's (2011) facets of understanding with the associated assessment criteria of the SANC. The approach of the Backward design to determine the evidence (assessment tasks) first assisted to put the focus on what is really required from the student and not just merely assessing for the purpose of assessing. The assessment tasks for the Scholarship for APN course will be further discussed in 5.4.7 and 5.4.9.

Having set the learning goals and formulated assessments that will enable students to produce evidence of achieving the learning goals leads into the third stage of Backward design.

5.2.1.3. Stage 3: Plan learning experiences

Concept-based curricula focus on conceptual inquiry, understanding and learning which requires active engagement and involvement from students in the learning experience (Erickson *et al.*, 2017; Marschall & French, 2018; Ignatavicius, 2019 and Giddens *et al.*, 2020). Giddens *et al.* (2020) suggest that learning is something students should accomplish themselves and the educator facilitates the process by purposefully designing

and developing learning activities that enhance student engagement with the learning experience.

Wiggins and McTighe (2011), Erickson *et al.* (2017), Marschall and French (2018), Ignatavicius (2019) and Giddens *et al.* (2020) all describe types of learning activities that will promote conceptual learning and understanding, develop critical thinking and reasoning skills and improve judgement and decision making. Examples of teaching and learning strategies that are fitting to achieve the above is shown in figure 5.2.

Giddens *et al.* (2020) state the learning activities within a concept-based curriculum should actively engage students, require higher order thinking skills and be meaningful to ultimately build enduring understandings. The emphasis should be on clinical judgement and provide a context to enable students to make connections and construct frameworks. This supports the ideas of Iter (2017) who believes the learning activities should be engaging but also offer students a level of control and establish independent learning through collaboration and allow for integration of learning through practice and feedback. Furthermore, the learning activities should assist the student to acquire competencies, make meaning of important ideas and transfer learning to new situations and ultimately lead to achievement of learning goals (Wiggins & McTighe, 2011; Erickson *et al.*, 2017; Marschall & French, 2018; Fletcher *et al.*, 2019; Ignatavicius, 2019 and Giddens *et al.*, 2020).

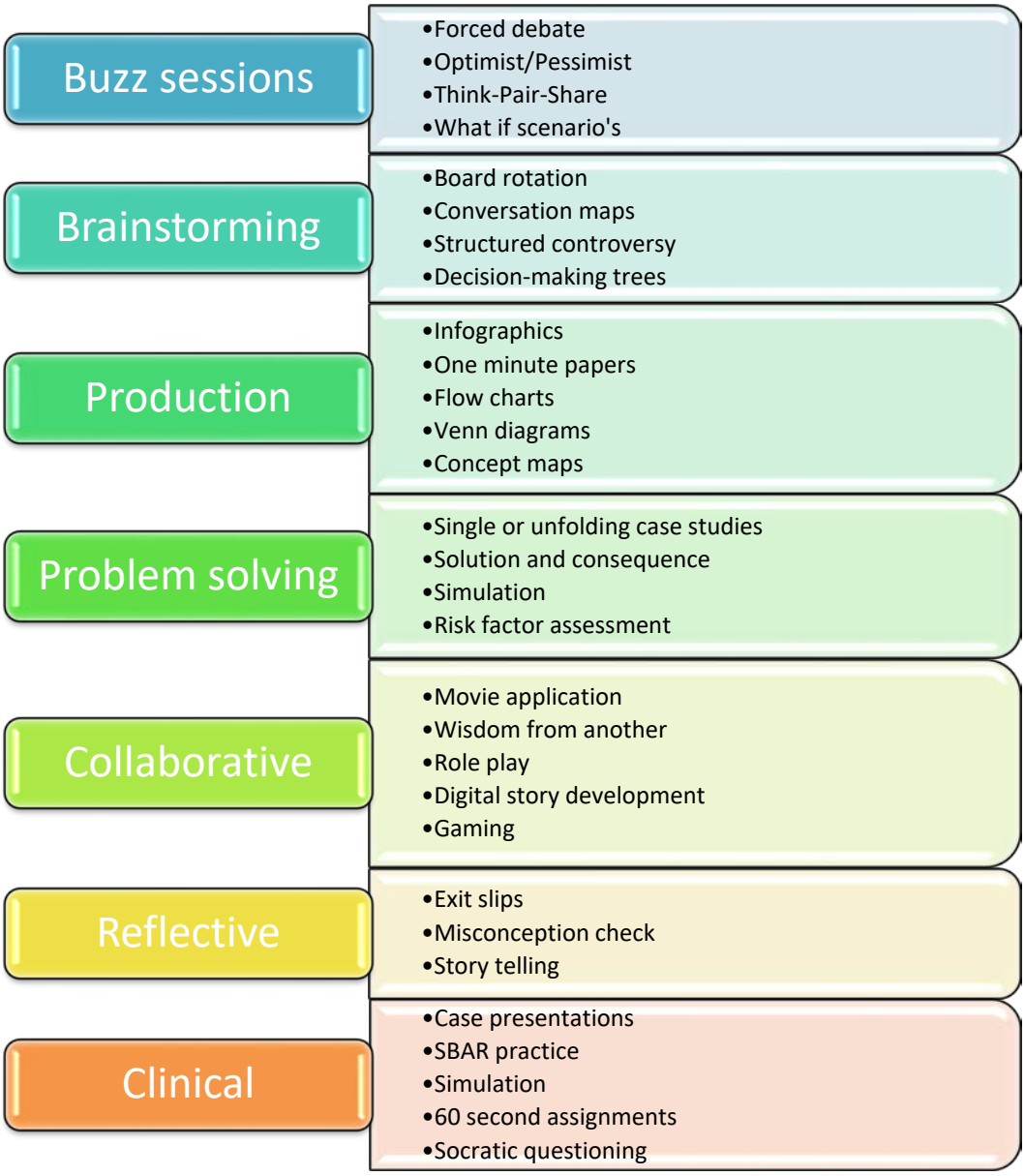

Figure 5.2 Examples of learning activities

To ensure authentic and transferable learning experiences that include engagement (the why of learning); representation (the what of learning) and action and expression (the how of learning) but ultimately promote higher order thinking and enduring understandings, a consistent approach for presenting content is required (Erickson *et al.*, 2017; CAST, 2018; Fletcher *et al.*, 2019 and Giddens *et al.*, 2020).

To ensure consistent presentation of concepts / content, Erickson *et al.* (2017), Ignatavicius (2019) and Giddens *et al.* (2020) suggest the development of an organising curriculum (conceptual) framework which identifies core themes underpinning the concepts and forms the building blocks for course development. Using an organising

curriculum framework will enhance curriculum integrity and assist with the creation of a teaching plan that will deepen the learning experience for students (Erickson *et al.,* 2017; Ignatavicius, 2019 and Giddens *et al.,* 2020).

The principles of conceptual learning as described by the authors (Erickson *et al.*, 2017; Ignatavicius, 2019 and Giddens *et al.*, 2020) in this section highlights that learning activities cannot be applied in isolation and requires a cohesive structure to present learning experiences. The researcher identified learning activities for the Scholarship for APN course from the activities as presented in figure 5.2 to be a good fit to meet the learning goals and assessment (evidence) tasks, however, the organising curriculum framework had to be developed first to organise the content as well as provide a structure to present concepts to enhance the learning experience for the student. The organising curriculum framework will be presented in 5.3.

The Backward Design as described in this section provided guidance for decisions related to the design of the micro curriculum of the course, however, an organising curriculum framework is needed to structure the micro curriculum and will be discussed in 5.3.

5.3. Organising curriculum framework

Content organisation is a critical step in the development of a concept-based curriculum as it provides structure to the presenting of content and improve curriculum integrity if done consistently following the same format (Wiggins & McTighe, 2011; Erickson *et al.*, 2017; Ignatavicius, 2019 and Giddens *et al.*, 2020). The manner in which content is organised affects the way students process and retain information, therefore it is important for the educator to unpack deeper understandings from the content to enable appropriate selection of learning activities (Ignatavicius, 2019).

Ignatavicius (2019) emphasised the importance of teaching concepts in-depth and suggest using a standardised concept analysis template for consistency. Giddens (2017) presented elements to be considered when developing a template and it is shown in table 5.1.

Table 5.1 Concept presentation template

Concept presentation template elements
Definition of the concept
Categories or scope of concept
Attributes or theoretic links
Examples in nursing and healthcare
Inter-related concepts
Exemplars
Transferable ideas
Nursing Role

(Adapted from Ignatavicius, 2019)

In the concept-based unit design steps of Erickson *et al.* (2017) as described in Chapter 2, the identification of unit strands facilitates the concept presentation in the identification of major headings that breaks the content into manageable parts.

For the organising of the content for the development of the Scholarship for APN course (artefact) the researcher drawn from both Erickson *et al.* (2017) and Giddens (2017) to develop a template for organising the content to present the concepts.

With the ever-changing healthcare environment, it is imperative to prepare nurses for the future, pushing boundaries and integrating theory and experiential knowledge to produce nursing knowledge in practice (Wilkes *et al.,* 2013). Hartjes (2018) explained that scholarship is such a mechanism that makes knowledge development within a discipline possible and is fundamental to both process and product to bring about change and improve nursing practice. Limoges and Acorn (2016) explain that scholarship is an intellectual endeavour to improve nursing practice through systematic inquiry and scrutiny of practice which reinforced Wilkes' *et al.* (2013) understanding of scholarship, that it enable evidence-based nursing, establish best practice standards and facilitate the transfer of research to practice. Scholarship is further a requirement for APN and was therefore deemed suitable to use the Scholarship Model of Boyer (1990) as a template to organise the content and structure the learning activities for the Scholarship for APN course.

The Boyer Scholarship Model (1990), provides a multi-dimensional application of scholarship that can be employed in various practice disciplines such as nursing. Boyer identified four (4) standards of scholarship which have been used to structure and organise the learning experiences for this study (AACN, 1999).

The first standard is the ***scholarship of discovery*** with the focus of inquiry that produces disciplinary and professional knowledge. It sets the foundation to expand existing understanding of nursing praxis and steers inquiry that tests or validates the known.

The second standard is the ***scholarship of integration*** and places knowledge in a larger context, emphasising the interconnectedness of ideas. The focus of inquiry is centred around interdisciplinary collaboration and understanding the world from different perspectives.

The third standard is ***scholarship of application*** or clinical scholarship, where knowledge of the profession is advanced and applied in practice.

The fourth standard is ***scholarship of teaching*** where inquiry is aimed at facilitating learning through reflection to become life-long learners. Embedded in the scholarship of teaching is also professional role modelling where knowledge transfer is facilitated from expert to novice.

The four (4) standards as described above formed the basis for organising the content and table 5.2 illustrates how the researcher matched the Boyer Scholarship Model to Giddens (2017) elements of concept presentation.

Table 5.2 Elements of concept presentation

Giddens: Elements of Concept Presentation	**Boyer Scholarship Model**
Definition	Scholarship of Discovery
Categories or scope of concept	
Attributes and theoretical links	
Examples in Healthcare and Nursing contexts	Scholarship of Integration
Inter-related concepts	
Exemplars	Scholarship of Application
Transferable ideas	
Nursing Role	Scholarship of Teaching / Reflection

The creation of the concept presentation template enables the development of teaching plans to structure the micro curriculum using the principles of Backward design as described in 5.2.

5.4. Concept teaching plan development

The creating of teaching or lesson plans are an important component of course development, in that it informs students of what is expected of them and what they can expect to gain from the course (Ignatavicius, 2019 and Giddens *et al.*, 2020).

A teaching plan provides details of the course and include elements shown in table 5.2: the information captured in the table was compiled from Wiggins and McTighe (2011); Erickson *et al.* (2017); Marschall and French (2018); Ignatavicius (2019) and Giddens *et al.* (2020).

Using the information as shown in table 5.2 as well as the Erickson *et al.* (2017) concept-based unit design steps (Chapter 2) a teaching plan template was developed to populate a teaching plan for each of the five (5) concepts identified during the Nominal Group discussion (Chapter 4).

Table 5.3 Elements for teaching plan development

Element	Description
Concept title	Name of the concept being presented in the teaching plan
Credit value	Determines the notional hours allocated to the concept
Notional hours breakdown	The time allocated to face-to-face contact, self-directed learning, work integrated learning and assessment
Learning goals / outcomes	Provide topical goals for learning and structured to show what making meaning, acquisition and transfer students should achieve.
Teaching and learning strategies	Strategies which incorporate phases of inquiry such as engage, focus, investigate, organise, generalise, transfer and reflect. Include the unit title, conceptual lens and conceptual question.
Assignments	Directs the pre-class, during class and post class learning activities to provide opportunities to learn conceptually for deep understanding, critical thinking and transfer of learning.
Assessment	Formative and summative evaluation providing opportunities for students to provide evidence of accomplishing learning goals.

The decisions for each aspect on the teaching plan template will be discussed as it applies to the concepts.

5.4.1. Unit title

A unit title has two main objectives i.e. to provide the focus of the unit and to grab the attention of students (Lingard, 2016). The unit title has a significant role in the learning experience of students as it affects the perception and understanding of the student. Flaherty *et al.* (2017) in their article entitled: 'Words matter' stated that words reflect and shape our thoughts, and therefore have the ability to psychologically influence the student's response to learning. If the unit title represents topics the student has no interest in, or the emphasis is on content only, the student might respond in a negative way by disengaging from the learning experience. However, if the unit title represents the interest of, and highlights the personal learning benefits to, the student it will bring about a positive mindset leading to a positive learning experience (Flaherty *et al.*, 2017).

Erickson *et al.* (2017) explain the characteristics of a good unit title and support Lingard (2016) and Flaherty *et al.* (2017) by stating a unit title should predict the focus of the unit. It is the first opportunity to actively engage students, grab their attention and spark inquiry. Having a well thought through title will trigger thinking, reflection and emotional engagement in students (Erickson *et al.*, 2017 and Flaherty *et al.*, 2017).

The choice of unit title for each concept will be discussed in 5.4.1.1 – 5.4.1.5

5.4.1.1. Concept 1: Advanced Practice Nursing

The concept Advanced Practice Nursing focuses on introducing the new role of specialist nurse, moving from general practice to specialised practice. This new role implies a change in professional identity which requires psychological, social and behavioural changes to meet expectations of the nursing profession (Hamric *et al.*, 2014).

During the Nominal Group (Chapter 4) the participants emphasised the need to prepare the student to become a specialist nurse and understand the requirements and challenges this new role in practice settings will bring.

The title: ***Who are we?: Moving towards specialisation***.

5.4.1.2. Concept 2: Collaboration

Collaboration is a dynamic interpersonal process that requires a total awareness and recognition of roles and responsibilities of, and meaningful engagement with, members of the interprofessional team, patient, family, and caregiver. It relies on the commitment to interact authentically, independently, and constructively to solve problems to accomplish

goals and optimal health outcomes. The APN is in a unique position within a fragmented and complex healthcare system to create opportunities to integrate and coordinate services to improve patient health outcomes (Hamric *et al.*, 2014).

The participants of the Nominal Group discussion (Chapter 4) identified the link between good communication and effective collaboration. The participants felt strongly about the role the specialist nurse (APN) play in collaboration and stressed the importance of them understanding factors impacting on the success of the team; be the link between all role players to provide holistic care; understand and value each team member and their role they play in providing quality care and finally should be actively involved in the decision-making process. To be able to do this the specialist nurse would require good communication skills.

The title: ***Better together: Making the connection.***

5.4.1.3. Concept 3: Clinical leadership

Clinical leadership refers to the ability to continuously improve care through influencing others. Clinical leadership occurs when we learn with and from others to build work relationships within the interprofessional team; instilling confidence in patients and team members and collaboratively bringing about change based on ethical judgements and shared decision making (Hamric *et al.*, 2014; Daly *et al.*, 2015 and Jooste, 2017).

Advanced Practice Nursing (APN) is a new category of nursing being introduced in South Africa and the specialist nurse (APN) will have to overcome initial concerns and resistance to integrate the role into the healthcare system. To achieve integration change is required and the individual practitioner would be expected to acquire competencies such as emotional intelligence, empowerment, and motivation to affect change.

This is in-line with the sentiments of the participants of the Nominal Group (Chapter 4). The participants agree that the specialist nurse should be prepared to be influential, bring about change in practice (change agent), advocate for the role, profession and patient and finally empower others.

The title: ***Turns and transitions: Leading change.***

5.4.1.4. Concept 4: Research Practitioner

A research practitioner is actively engaged in evidence-based practice activities related to their area of speciality and uses knowledge to improve patient outcomes and the nursing profession. An understanding of evidenced-based practices and clinical judgement is

required by the APN to conduct and implement best practices in practice settings (Giddens *et al.*, 2020).

The highlights from the Nominal Group discussion (Chapter 4) were to prepare the specialist nurse to be able to improve quality in practice settings through using evidence-based practices. The specialist nurse must have the knowledge and understanding of the speciality area but also of the principles of the research process.

The title: ***Navigating the evidence maze: Moving from evidence to action***

5.4.1.5. Concept 5: Practice Development

Practice development is a facilitated and continuous process of improvement to promote the delivery of evidenced-based quality healthcare. Practice development is practitioner driven and nurses have a key role to influence the promotion of improvement through empowerment, engagement, and emancipation. Practice development occurs in three (3) areas: *the person* – improve the self through engaging in life-long learning to flourish and grow; *the profession* – promote the profession developing a value-system within ethical-legal frameworks and evidence-based practice; the *practice environment* – develop the practice environment using principles of quality assurance (Hamric *et al.*, 2014 and Heyns *et al.*, 2017).

The Nominal Group discussion (Chapter 4) identified three (3) areas in which the nurse specialist (APN) should develop: (1) personal development – being system thinkers to bring about change, focussing on life-long learning and influence others to grow; (2) professional development – understand the regulatory framework to improve professional standards, using principles of education to mentor and coach others; (3) practice development – understand governance to improve the quality of care within the ethical-legal framework.

The title: ***Gaining momentum***

5.4.2. Conceptual lens

The conceptual lens is determined by answering the question: “What do I want the students to understand at a deeper level?” The purpose of using a conceptual lens is that it focuses the students’ thinking and guides the direction and depth of inquiry. The conceptual lens therefore informs the teaching focus and the learning goals (Wiggins & McTighe, 2011 and Erickson *et al.*, 2017).

The conceptual lens is a teaching element that engages synergistic thinking which is a critical feature of the concept-based curriculum (Erickson *et al.*, 2017). Synergistic thinking is described within the conceptual learning context as blending linear (logical) and non-linear (associative) thinking or the interaction between factual level thinking with conceptual level thinking to gain deeper understanding and the transfer of ideas to other contexts or situations (Wiggins & McTighe, 2011 and Erickson *et al.*, 2017).

Erickson *et al.* (2017) further describe the conceptual lens as being instrumental to facilitate synergistic thinking stating it is the "*vehicle that sets up synergy between lower and conceptual processing centres in the brain".* Educators use the conceptual lens to engage student interest and students are invited to apply their own thinking and experience to the course which creates a sense of worth as their input is valued; assist with making sense of the content which then allows for transfer of student understanding across situations.

In 5.4.2.1 – 5.4.2.5 the conceptual lens for each concept will be discussed.

5.4.2.1. Concept 1: Advanced Practice Nursing

The focus for this concept was rooted in becoming an advanced practice nurse, taking on the role of a specialist nurse within the South African context. This entails the disengagement from the role of a professional nurse and transitioning into the role of a specialist nurse with confidence and competence.

The core content captured in the conceptual lens includes:

- Establishing a role identity
- Enact the role with confidence
- Reflect on role expectations
- Shaping the role by implementation

Based on the notions above the conceptual lens for this learning unit is: ***Role transitioning***

5.4.2.2. Concept 2: Collaboration

Collaboration is the integration of activities and knowledge that requires a partnership of shared autonomy and responsibility (Morley & Cashell, 2017). It relies on teamwork which includes the principles of coordination, cooperation, shared decision-making, and partnerships. Working within a specific practice environment involves understanding the

organisational culture which determine how the people within the organisation conduct themselves. Healthcare is known for power struggles between various healthcare professionals which negatively impact the delivery of quality care. Carlström and Eckman (2012) describe the organisational culture as the common identity between groups of people that determine the power distribution and flow of information amongst its members which in turn influence the extent to make decisions, developing new ideas and personal expression. The APN is in a unique position to facilitate the process of collaboration within the inter-disciplinary team by means of blending individual team values and expectations with the mission, vision and values of the practice environment.

The content the conceptual lens focusses on:

- Characteristics of collaboration and the attributes needed for successful collaboration in the practice environment.
- The role of the APN in establishing working partnerships, delineating the level of accountability and responsibility of team members.
- Team performance, decision making and communication.

Organisational culture was therefore chosen as the conceptual lens for this learning unit, as it encapsulates the essence of collaboration.

5.4.2.3. Concept 3: Clinical leadership

The main purpose of a clinical leader is to propose and implement change strategies to enhance quality and to transform service by influencing others to bring about change (Hamric *et al.*, 2014 and Jooste, 2017). Through role modelling, the clinical leader empowers and motivates patients and colleagues to change perceptions, attitudes and behaviours.

With the introduction of the APN role within the South African healthcare environment, the specialist nurse will have to prepare, equip and support peers and staff members to adopt new ways of providing nursing care to stay abreast with a rapid changing healthcare environment. Advocacy for the APN role but also for patients becomes the most important aspect of the leadership role and requires an understanding of change management to affect change.

The content focus:

- Components of leadership and change: shared values, decision-making, ethical principles, and culture.
- Principles and dynamics of change leadership and management
- Principles of empowerment, motivation, and persuasion to affect change
- The APN role and leadership for change.

Change management, as the conceptual lens for this learning unit represents the qualities needed to lead and manage change.

5.4.2.4. Concept 4: Research Practitioner

Nursing practice is informed by evidence and guides practice guidelines, decision making and clinical judgement of practitioners. Evidence-based practice encourages nurses to keep up to date with the newest developments and require and understanding and implementation of evidence-based practice principles in the practice settings (Hamric *et al.*, 2014).

Content focus:

- Evidence-based enquiry cycle: Assess, ask questions, acquire evidence, appraise evidence, apply evidence.
- Clinical Judgement: Noticing, interpreting, responding, and reflecting

The conceptual lens for this learning unit is: ***Evidence-based practice***

5.4.2.5. Concept 5: Practice Development

The APN has an important role to play in developing and improving nurses and nursing as a profession. However, this is a new role within the South African context, and requires a deeper understanding of how the APN role will fit into the healthcare system of South Africa and what the impact of introducing this role would, and could have, on moving nursing practice forward.

Core content:

- Advanced practice nursing within the regulatory framework
- Role promotion and implementation within governance structures
- Contributions of APN within the healthcare system.

- Advancing nursing through quality assurance and the APN role
- Development and continuous education

The conceptual lens chosen for this learning unit is: ***Role promotion***. Through this lens the student will have to explore their understanding and perceptions of APN and their contribution within the healthcare system to develop themselves, the profession, and the practice environment.

5.4.3. Learning goals

Wiggins and McTighe (2011) described learning goals as the roadmap to teaching and learning as it gives direction, focus and cohesion around student thinking, engagement and behaviour. They further explain learning goals should be framed to show the student accomplishments and be reflective of understanding. The learning goals should include aspects of what the student must make meaning of, autonomous transfer to new situations and the acquisition of knowledge and skills.

Erickson *et al.* (2017) also highlights learning goals in terms of critical content, what the student must know; key skills, entails the transfer of key skills and apply to real world situations and the big ideas or generalizations which enable student engagement and thinking in the steps of unit design.

The learning goals for this course have been constructed according to the three areas identified by Wiggins and McTighe (2011) namely: Making meaning, Acquisition and Transfer.

The learning goals for each concept are illustrated in 5.4.3.1 – 5.4.3.5

5.4.3.1. Concept 1: Advanced Practice Nursing

Table 5.4 Learning goals for Advanced Practice Nursing

Making meaning	Acquisition	Transfer
• Explore conceptual models of advanced practice nursing from an international perspective to promote implementation of APN in South Africa. • Critically evaluate own competencies against the role requirements of advanced practice nursing to facilitate career development.	Master competences, knowledge and behaviours such as reflection, self-awareness and self-knowledge in order to take on the role of an advanced practice nurse.	Create a personal development plan to navigate challenges and opportunities for transitioning into the specialist nurse role.

5.4.3.2. Concept 2: Collaboration

Table 5.5 Learning goals for Collaboration

Making meaning	Acquisition	Transfer
• Explore the meaning of, and opportunities for, interprofessional collaboration within specialist healthcare services. • Understand the role of the specialist nurse in implementing collaborative care.	• Acquire the skills of effective communication, adaptability and empathy to enable a collaborative working environment. • Facilitate the establishing of interprofessional working partnerships to improve patient care. • Understand and assess a patient holistically in order to mobilize resources of the healthcare team to create a patient-focused care plan.	• Apply the characteristics and principles of learning, sharing and collaboration to multi-functional and interdisciplinary teams.

5.4.3.3. Concept 3: Clinical leadership

Table 5.6 Learning goals for Clinical Leadership

Making meaning	Acquisition	Transfer
• Understanding the 5 steps of change leadership model by Gill (2003). • Appraise the internal and external forces' influence on leadership and affecting change within an ethical-legal framework. • Analyse dynamics and competencies of leading change for the individual practitioner and the organisation.	• Develop strategies to implement change through leadership. • Develop strategies to deal with workplace challenges. • Employs motivation and empowerment strategies to gain cooperation from team members to affect change.	• Analyse clinical leadership and management of situational challenges in the context of healthcare delivery and improved patient outcomes. • Critically appraise own and others' clinical leadership strengths and areas for personal development to improve the quality of care.

5.4.3.4. Concept 4: Research Practitioner

Table 5.7 Learning goals for Research Practitioner

Making meaning	Acquisition	Transfer
• Explore the similarities and differences between quality improvement, research utilization and evidence-based practice with respect to their usefulness in the nursing context. • Review the elements of the evidence-based enquiry cycle (assess, ask questions, acquire evidence, appraise evidence, apply evidence). • Understand the steps of Lasater's Clinical Judgement Rubric i.e. effective noticing, effective interpreting, effective responding and effective reflecting).	• Develop skills to access, assess and apply evidence in clinical nursing settings to improve the quality of patient care. • Mastering skills, knowledge and behaviours such as decision making and problem-solving to implement evidence-based practices and clinical judgement to improve quality of patient care.	• Integrate the concepts of evidence-based practice and clinical judgement into the specialist nursing context to improve the quality of patient care.

5.4.3.5. Concept 5: Practice Development

Table 5.8 Learning goals for Practice Development

Making meaning	Acquisition	Transfer
• Analyse the ethical-legal framework in relation to APN to promote the role within the healthcare context. • Using systems thinking principles develop an opinion on how APN fits into the healthcare system. • Evaluate factors impacting the delivery of quality care and the role of APN in quality assurance. • Discuss the impact of continuing education on promoting the APN role within the healthcare context.	• Formulate a value-system within the ethical-legal framework for shared governance. • Evaluate the importance of quality assurance to improve care delivery.	• Develop strategies to integrate continuing education to promote, and advocate for, the specialist role in the healthcare context.

5.4.4. Inter-related concepts

Conceptual learning is central to a concept-based curriculum which facilitates deep understanding and the organisation and application of essential knowledge, skills and attitudes to diverse situations (Wiggins & McTighe, 2011; Fletcher *et al.*, 2019 and Giddens *et al.*, 2020). Concepts are centred around big ideas and assist students to organise and categorise information forming connections to enable assimilation, retrieval, and transfer to real world situations (Fletcher *et al.*, 2019 and Giddens *et al.*, 2020). Concepts are not seen in isolation but are interlinked and complex and it is important for students to recognise the relationship amongst concepts to make meaning of content within and across courses of a particular programme (Giddens *et al.*, 2020).

The Scholarship for APN is one of three courses which makes up the postgraduate diploma for specialist nurses. The concepts of the three courses are shown in table 5.9

The inter-related concepts for each concept are illustrated in 5.4.4.1 – 5.4.4.5.

Table 5.9 Concepts included in the Postgraduate Diploma for Specialist Nurses

Scholarship for Advanced Practice Nursing	Scientific Foundations for Specialist Nursing Practice	(elective) Field of Specialisation
Advanced practice nursing **Collaboration** **Clinical leadership** **Research practitioner** **Practice development**	Advanced clinical assessment Clinical reasoning Nurse prescribing Patient outcomes evaluation	Epidemiology Primary, secondary and tertiary prevention Advanced pathophysiology Diagnostic, special investigations and management Major situations and emergencies Ethical and legal considerations in clinical practice Supportive and palliative caring

5.4.4.1. Concept 1: Advanced Practice Nursing

The concept of Advanced Practice Nursing under the conceptual lens of role transitioning, requires the student to explore the situations where they would need to enact the qualities of being an APN. The inter-related concepts therefore allow them to explore their sphere of influence as an APN.

Figure 5.3 Inter-related concepts: Advanced Practice Nursing

5.4.4.2. Concept 2: Collaboration

The concept of Collaboration explores the principles of collaboration and requires the student to create opportunities within the healthcare system to collaborate. The inter-related concepts guide the student to extrapolate opportunities to promote collaboration and also identify adaptations to collaboration in different situations.

Figure 5.4 Inter-related concepts: Collaboration

5.4.4.3. Concept 3: Clinical leadership

The student needs to be prepared to affect change through leadership when embracing a new role as Nurse Specialist within the practice setting. The inter-related concepts are representative of the understandings the student need to influence practice and enact their leadership ability to improve the patient outcomes.

Figure 5.5 Inter-related concepts: Clinical Leadership

5.4.4.4. Concept 4: Research Practitioner

The Nurse Specialist in their role of APN is required to promote best practices and therefore needs to understand the research process, evidence-based practice and principles of clinical judgement. The inter-related concepts provide opportunities for the student to transfer their learning across the practice domains of APN (Chapter 1) to improve health outcomes of patients.

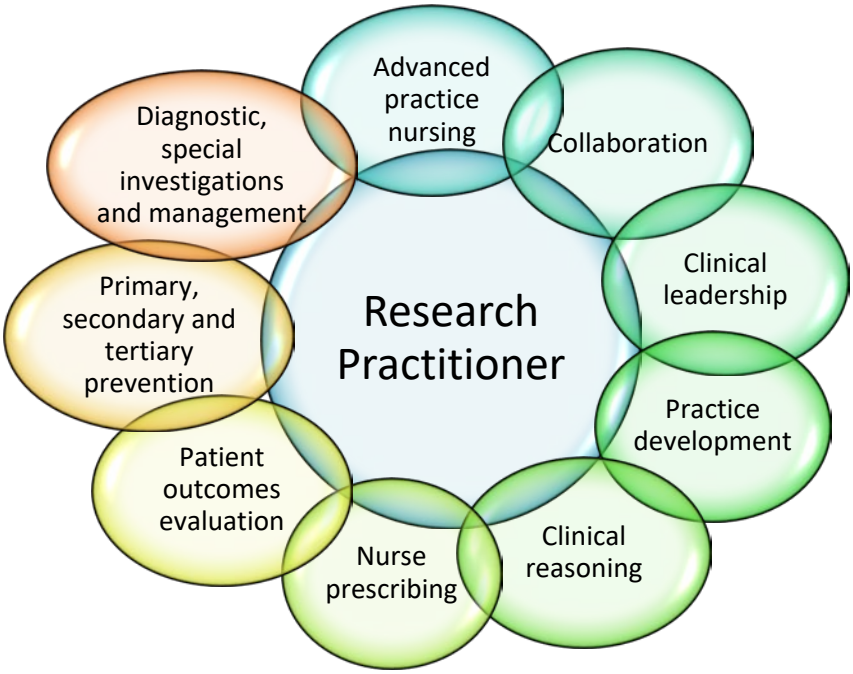

Figure 5.6 Inter-related concepts: Research Practitioner

5.4.4.5. Concept 5: Practice Development

Practice development as a concept is complex as it involves the person, the profession and the practice. The inter-related concepts provide opportunities for the student to reflect on the conceptual lens for this concept: role promotion. It also assists to identify areas and opportunities to promote the APN role through development of the person, the profession and the practice drawing on the qualities and competencies gained in this and other concepts.

Figure 5.7 Inter-related concepts: Practice Development

5.4.5. Competencies

Competencies require the application and integration of a combination of skills and incorporates ability, knowledge and attitudes that make up a person's role, to meet complex demands (Ignatavicius, 2019). Being competent the student demonstrates the ability to perform a certain skill at a specific standard, whereas competency refer to the manner in which the standard is achieved and requires the ability to translate knowledge and skill into action in a practice setting (Englander *et al.*, 2013; Hamric *et al.*, 2014 and Billings & Halstead, 2016).

Sastre-Fullana *et al.* (2014) have conducted a review of the competencies associated with APN and identified an extensive list of competency domains (table 5.9) as they call it which includes a combination of skills, knowledge and attributes linked to the APN role.

To practice effectively the nurse would require knowledge and skill competencies in the domains of APN practice (Hamric *et al.*, 2014). Competencies are linked and derived from performance expectations of society, the organisation and the profession and should prepare the nurse to enable evidence-based practice standards to facilitate the transfer of knowledge but also to promote the role of the advanced practice nurse (Englander *et al.*, 2013; Hamric *et al.*, 2014 and Ignatavicius, 2019).

Table 5.10 Competency domains for APN

Competency domains as identified by Sastre-Fullana *et al.* (2014)		
Advocacy	Professional autonomy	Care management
Change agent	Collaboration	Communication
Consulting	Confidence	Cultural awareness
Decision making	Evidence-based practice	Education
Ethical-legal practice	Expert	Clinical judgement
Leadership (professional and clinical)	Mentoring and coaching	Health promotion
Quality management	Research	Reflective practice (self-awareness)
Resource management	Safety	

The scoping review (Chapter 3) and the nominal group discussion (Chapter 4) identified core competencies, characteristics and attributes within each concept that the advanced practice nurse needs to be able him/her to transition into role and become an APN. The Scholarship for APN course is directed towards professional nurses with various degrees of experience in nursing and therefore enters the program with existing competencies at various levels. The student, therefore, might possess the capability to perform related competencies identified for each concept as illustrated in 5.4.5.1 – 5.4.5.5, and should explore for themselves at what level they perform.

5.4.5.1. Concept 1: Advanced Practice Nursing

The competencies identified in the concept of Advanced Practice Nursing indicate the related skills, attitudes, and characteristics the student will develop or enhance to take on the role of APN.

Figure 5.8 Related competencies for Advanced Practice Nursing

5.4.5.2. Concept 2: Collaboration

The related competencies for collaboration focus on the skills and attributes needed to enhance collaboration and team work. Having an understanding how these attributes influence and affect the success of a collaborating team.

Figure 5.9 Related competencies for Collaboration

5.4.5.3. Concept 3: Clinical leadership

The competencies identified for the concept of Clinical leadership will assist the student to provide evidence for achieving the learning goals. These competencies are also linked to the inter-related concepts.

Figure 5.10 Related competencies for Clinical Leadership

5.4.5.4. Concept 4: Research Practitioner

The competencies related with the concept of Research practitioner will assist the student to transfer learning to practice settings and use principles of evidence-based practice and clinical judgement to improve quality of care.

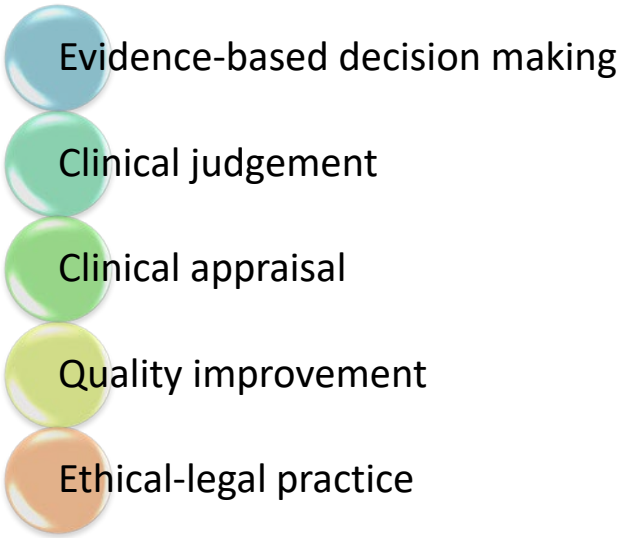

Figure 5.11 Related competencies for Research Practitioner

5.4.5.5. Concept 5: Practice Development

To integrate strategies of continuing education and practice development requires specific competencies to be successful. The identified competencies will assist the student to promote development across practice settings and situations.

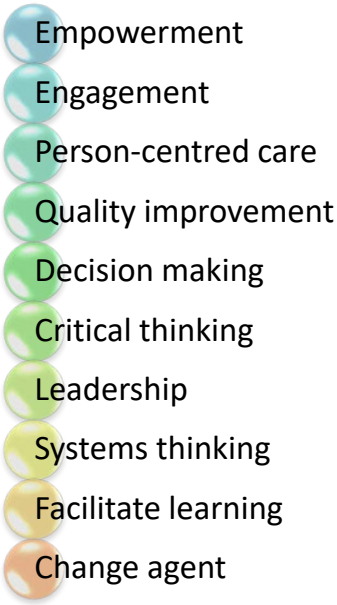

Figure 5.12 Related competencies for Practice Development

5.4.6. Conceptual question

The conceptual question engages thinking and reflection processes. The conceptual question is a teaching element that engages synergistic thinking and is considered to be of higher order thinking. It requires the student to analyse, interpret and translate information in terms of their relationship to the question and the concept (Wiggins & McTighe, 2011 and Erickson *et al.*, 2017).

Erickson *et al.* (2017) describe conceptual questions as timeless and is used to guide the student to explore the concept from their own experience and perspective. It can be integrated in the teaching and learning activities or as a reflection exercise.

The conceptual questions identified for each concept will be described in 5.4.6.1 – 5.4.6.5.

5.4.6.1. Concept 1: Advanced Practice Nursing

"Is the specialist nurse just another 'hand maiden' of healthcare?"

Transitioning into a new role the question aims to explore their own understanding and perception of the specialist nurse role which will lead to deeper disciplinary understanding. It sets the scene for the content that will be introduced in the concept.

5.4.6.2. Concept 2: Collaboration

"Is too much collaboration a bad thing?"

Collaboration is a term that is widely used and has specific criteria and outcomes. With this question the students have to analyse the question and identify their own needs with regards to collaboration.

5.4.6.3. Concept 3: Clinical leadership

"What is everyone thinking but no one is saying?"

This question challenges the student to reflect on own experiences and explore the idea trust and leadership. With the new role being introduced it might not be easy to influence others without being confident with oneself.

5.4.6.4. Concept 4: Research Practitioner

"Does curiosity kill the cat?"

Evidence and evidenced-based practice are the cornerstones of advanced practice nursing. The phrase: "curiosity killed the cat" is generally understood to mean one should not ask unnecessary questions as new information can be more harmful than helpful. The conceptual question therefore challenges the student to interrogate their preconceived ideas to gain better understanding of evidence.

5.4.6.5. Concept 5: Practice Development

"Who decides when to question the status quo?"

Practice development infer moving forward and change. With the Nurse Specialist being a new role to be introduced in the South African healthcare system it is important to explore and unpack the level of influence s/he will have.

5.4.7. Unit strands (Boyer Model)

The unit strands are headings to structure the content into manageable parts (Erickson *et al.*, 2017). The unit strands identified for this course cut across all the concepts and were

based on the Scholarship model of Boyer (1990) and include: discovery, integration, application and teaching or reflection.

The unit strands represent the learning plan and include the three stages of the Backward Design: desired results, evidence (assessment) and learning events (Wiggins & McTighe, 2011).

To be successful in the 21st Century students should not only be consumers of knowledge that only require recall from memory, but be actively involved in higher order thinking and become producers of knowledge to solve and manage real-world problems and develop different perspectives (Iter, 2017). For students to become fit for practice, the focus of learning should be on thinking about the process of learning rather than the outcome or product which requires the integration of assessment into learning events (Wiggins & McTighe, 2011; Erickson *et al.*, 2017 and Iter, 2017).

The learning events were constructed using the three steps of the Backward Design:

1. ***Desired Results***

   Aligned with the overall learning goals, for the construction of learning events the researcher had to consider the essential activities and questions for the student to explore to encourage higher order thinking processes. This would enable the student to challenge pre-conceived ideas and engage in problem-solving in an innovative manner.

2. ***Assessment (Evidence)***

   Assessment evidence refers to the performance tasks through which the student has to demonstrate the achievement of knowledge, understanding and proficiency.

   In the second step of the Backward Design (Wiggins & McTighe, 2011), decisions around the performance evidence a student should provide has been made, and although forms part of the assessment process, it informs the learning activities. Billings and Halstead (2016) affirm that assessment strategies can form part of the learning process and should be inclusive of all learning domains. They further stated when assessment strategies are used during the learning activities it allow the student to practice and gain confidence in the process by which they will be ultimately evaluated (Billings & Halstead, 2016).

Hansen (2011) describes performance tasks as learning activities or assessment tasks that yield a demonstrable product, performance or reflection that serves as evidence of learning. Furthermore, it calls for the student to apply and integrate understanding to real world situations and not merely recall and recognition.

Billings and Halstead (2016) provided a list of assessment strategies with a dual purpose of being teaching strategies as well and include: Portfolio of evidence; Role plays; Reflection; Opinion paper; Essays; Debates; Verbal questioning; Concept mapping; Recordings; Simulation and Service learning. These strategies stretch across the learning domains of cognitive, affective and psychomotor and require high order thinking skills as well as prepare the student for professional practice.

The assessment and teaching strategies mentioned above were used to promote learning and provide a range of opportunities for the students to demonstrate the acquisition and transfer of learning.

3. Learning events

Learning events represents the learning experiences to prepare students to achieve the assessment and performance tasks (Erickson *et al.*, 2017). The learning activities should present opportunities for the student to learn conceptually for critical thinking and transfer (Ignativicius, 2019 and Giddens *et al.*, 2020).

These three steps are illustrated as they apply to each concept below in tables 5.11–5.15.

5.4.7.1. Concept 1: Advanced Practice Nursing

Table 5.11 Learning plan: Advanced Practice Nursing

Unit strand	Desired Results – learning outcome	Assessment tasks - Evidence	Learning event - experience
Discovery	Explore APN conceptual models that guide APN development	Construct definitions for key terms identified from conceptual models. • Product	Group activity: comparing summaries of conceptual models
Integration	Discuss the various APN role components and relate to SA context	Selection of appropriate roles, characteristics, and competencies. • Product	Draw a picture to illustrate the essence of an APN
Application	Discuss the benefits of implementing APN in SA Reflect on perspectives of APN	Argue the impact of challenges for APN implementation. • Performance	Group discussion: Benefits and challenges around perspectives for APN implementation

Teaching / Reflection	Identify own gaps and strengths to take on the APN role	Write a pledge to illustrate your commitment to implementing the APN role. • Product and reflection	Write and record pledge relate conceptual question and state the influence on pledge

5.4.7.2. Concept 2: Collaboration

Table 5.12 Learning plan: Collaboration

Unit strand	Desired Results	Evidence	Learning event
Discovery	Explore APN role within collaboration Establish working partnerships to improve patient outcomes.	Ability to identify and discuss characteristics of collaboration. • Performance and reflection Able to facilitate the formation of a well-functioning team. • Performance	Story telling around a time when collaboration failed describing how the experience influenced attitudes. Interactive workshop on team formation
Integration	Demonstrate the use of communication principles within in teams	Apply communication principles to improve team functioning. • Performance	Story telling with debrief – when did someone not take you seriously?
Application	Relate behaviours that impact on collaboration	Reflect on constructive and how destructive behaviours have an influence on partnerships. • Performance	What if scenario's – breaking bad news / dealing with uncomfortable situations
Teaching / Reflection	Reflect on attitude and influence on collaboration	Algorithm to illustrate sphere of influence. • Product and reflection	Self-directed learning

5.4.7.3. Concept 3: Clinical leadership

Table 5.13 Learning plan: Clinical Leadership

Unit strand	Desired Results	Evidence	Learning event
Discovery	Understanding the influence of ethical principles, values and culture on healthcare	Development of a shared vision statement incorporating values and culture. • Product	Values clarification discussion: just because it is a good idea should we do it.
Integration	Evaluate the process of change and appraise the ethical framework of the healthcare context	Argument on what should we say no to when dealing with ethical dilemmas. • Performance	Class activity on ethical dilemma – unpack a real-life event
Application	Develop strategies to implement change through leadership	Map a strategic plan to implement in own practice setting. • Product	Class activity – implementation of a new duty roster
Teaching / Reflection	Reflect on own leadership role	Develop a 5-year development plan. • Product and reflection	Concept map to illustrate leadership roles to affect change in own practice setting

5.4.7.4. Concept 4: Research Practitioner

Table 5.14 Learning plan: Research Practitioner

Unit strand	Desired Results	Evidence	Learning event
Discovery	Develop skills to conduct an evidence-based study	Access an article and assess the evidence in relation to clinical judgment. • Product and performance	Journal club – discuss elements of evidence
Integration	Unpack the PICO question to acquire information	Formulate a PICO question to improve nursing practice. • Product	Asking questions
Application	Appraise quality of literature Summarise main findings	Interpret findings from literature search and relate to clinical judgement. • Performance	Steps of an evidence-based study
Teaching / Reflection	Overcome barriers to implement plan	Develop a plan to implement recommendations of literature search. • Product and performance	Class discussion: good intentions with bad results Harmless interventions with bad outcomes

5.4.7.5. Concept 5: Practice Development

Table 5.15 Learning plan: Practice Development

Unit strand	Desired Results	Evidence	Learning event
		Regulatory framework	
Discovery	Analyse regulations pertaining to APN	Formulate practice parameters within the ethical legal framework present in a concept map. • Product	Carousal exercise – document review
Integration	Promote APN- role implementation within governance structures	Compile a strategic plan to implement APN in practice. • Product and reflection	Think-pair-share activities on governance structures
Application	Develop job specifications for implementation	Create a job description for an APN in a speciality unit. • Product	Group work – investigate job specifications
Teaching / Reflection	Reflect on expectations for implementation of APN	Write a reflection to what extent you qualify to apply for the position in the job description. • Reflection	Self-directed learning
		Health systems	
Discovery	Understand health systems and the relation to APN	Apply principles of systems thinking to the role of APN present in a concept map. • Product and Performance	Workshop on systems thinking
Integration	Describe how the APN fits into the health system	Participate in an interactive workshop on health systems. • Performance	Inter active workshop
Application	Debate the contributions APN	Write an opinion paper on the governance role of	Self-directed learning

	makes to the various health sectors	APN within the health sector. • Product	
Teaching / Reflection	Reflect on issues impacting on implementing APN	Draw an organogram to indicate where you fit into the system as an APN with justifications. • Product and reflection	Self-directed learning
Quality assurance			
Discovery	Analyse the components of quality assurance, quality control and quality auditing	Group discussion on each aspect in relation to APN (Depth of discussion). • Performance	Carousel exercise
Integration	Identify enablers and barriers to quality and the role of APN	Develop a quality improvement plan using the PDSA model. • Product and reflection	Story telling: Time when quality care was not received. Debrief – how can we change the story?
Application	Relate the APN role within the quality management process	Review the quality improvement plan and identify role players and justify the significance. • Performance	Group discussion on role players in quality management (accountability and responsibility)
Teaching / Reflection	Review own strengths and weaknesses in relation to ensuring quality	Present a SWOT analysis of self. • Reflection and product	Self-directed learning
Lifelong learning			
Discovery	Explore aspects of lifelong learning and practice development	Create a quiz to illustrate the elements of lifelong learning and practice development. • Product	Class activity – playing of individual quizzes and critique
Integration	Showcase the relationship of lifelong learning and practice development	Presentation showing an identified learning opportunity and the expected impact on practice development. • Product and reflection	Self-directed learning
Application	Integrate lifelong learning into practice settings	Develop a strategy to integrate lifelong learning in practice settings. • Product	Class presentations of integration strategies with discussion
Teaching / Reflection	Reflect on own contribution to practice development	Develop a personal continuing education plan. • Reflection and product	Self-directed learning

5.4.8. Exemplars

Exemplars are topics representing the concept and used as a teaching element to develop enduring understandings (Ignatavicius, 2019 and Giddens *et al.*, 2020). Exemplars are used to assist students to grasp the application of the concept in suitable

contexts and it replicates key challenging situations found in real life (Hansen, 2011 and Giddens *et al.*, 2020).

The exemplars for each concept are listed below in 5.4.8.1 – 5.4.8.5.

5.4.8.1. Concept 1: Advanced Practice Nursing

The focus of this concept is on the transitioning of the professional nurse into the role of a nurse specialist. The exemplars provide real life situations the student will encounter upon entering the practice environments.

- Newly qualified Clinical Nurse Specialist
- Experienced Clinical Nurse Specialist entering a new setting
- Nurse Educator as Nurse Specialist

5.4.8.2. Concept 2: Collaboration

Collaboration is an integral part of the healthcare system and the exemplars chosen for this concept provide an opportunity for the student to experience collaboration in different situations which will require to adapt their approach to collaboration.

- Mass casualty
- Inter-professional teams
- Morbidity and Mortality meetings

5.4.8.3. Concept 3: Clinical leadership

Similar to collaboration, the student will have to adapt their leadership style according to the situation and context. The exemplars were chosen to provide opportunities for the student to explore leadership in different situations.

- Ethical dilemmas (Esidimeni)
- National Health Insurance
- Introducing a new scope of practice

5.4.8.4. Concept 4: Research Practitioner

The Nurse Specialist will be required to understand and apply principles of research in practice and through the exemplars the student will gain confidence to apply the principles of inquiry and evidence-based practice.

- Literature review
- Evidence-based study

5.4.8.5. Concept 5: Practice Development

The concept of practice development is a complex concept in it involves the person, the profession, and the practice environment. The exemplars aim to provide a contextual reference point to understand the complexity of practice development and areas to consider for development and improvement.

- Regulatory framework
- Health systems
- Quality assurance
- Lifelong learning

5.4.9. Assessment

Assessments are used to evaluate student learning and can either be formative, while the teaching and learning process is unfolding, or summative which is the final assessment (Billings & Halstead, 2016). Assessment strategies are used to obtain information about the learning process, to make judgements regarding performance and finally to determine competence proficiency (Billings & Halstead, 2016).

A consolidating assessment strategy at the end of each concept was incorporated in the form of a capstone portfolio. This is a multifaceted, assignment-based assessment and serves as a consolidation process for each concept as well as a concluding professional development and intellectual experience for the student at the end of the course (edglossary, 2014).

A capstone portfolio is designed to encourage critical thinking, development of 21st Century learning skills, increase student motivation and engagement, improve self-perceptions, build confidence and prepare students for employability while providing an opportunity for the student to demonstrate learning achievements and proficiency (edglossary, 2014).

The assessment strategies are shown in 5.4.9.1 – 5.4.9.5.

5.4.9.1. Concept 1: Advanced Practice Nursing

The focus of this concept was on role transitioning. The student will therefore be required to incorporate all aspects of role transitioning in the development of a growth plan illustrating their understanding of advanced practice nursing.

The capstone portfolio assignment (figure 5.13) is based on the learning goal for "transfer": Navigate challenges and opportunities to create a personal development plan for transitioning into the Nurse Specialist role.

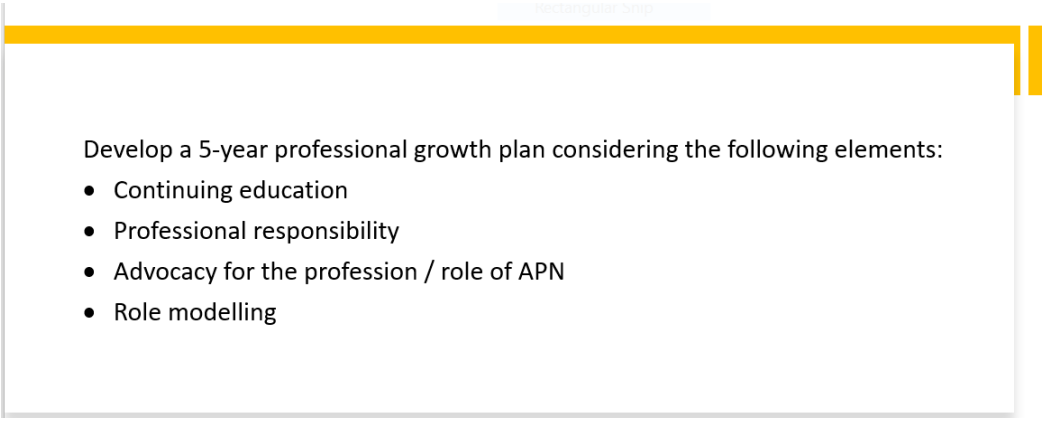

Figure 5.13 Capstone assignment: Advanced Practice Nursing

5.4.9.2. Concept 2: Collaboration

Drawing from the conceptual lens for this concept, organisational culture, the assessment provides an opportunity for the student to apply and transfer their understandings of collaboration within the culture of the organisation and is shown in figure 5.14.

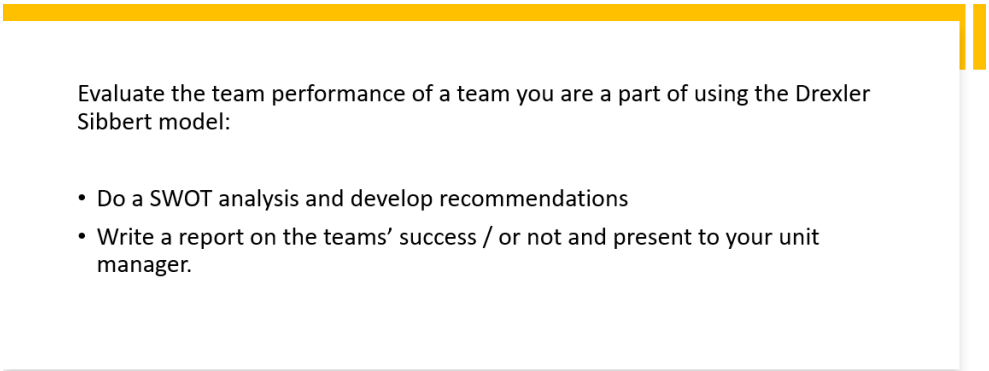

Figure 5.14 Capstone assignment: Collaboration

5.4.9.3. Concept 3: Clinical leadership

The performance evidence in this concept requires the student to reflect on their own leadership ability to affect change and transfer understanding to their own practice environment. It is based on the learning goal: "Analyse clinical leadership and management of situational challenges in the context of healthcare delivery and improved patient outcomes." The assignment is illustrated in figure 5.15.

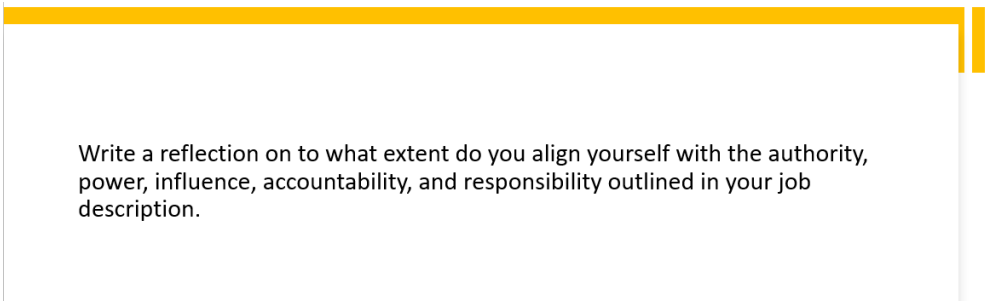

Figure 5.15 Capstone assignment: Clinical Leadership

5.4.9.4. Concept 4: Research Practitioner

The performance evidence for this concept is related to the "transfer" learning goal: Integrate the concepts of evidence-based practice and clinical judgement into the specialist nursing context to improve the quality of patient care. The student should demonstrate their understanding of the principles of evidence-based practice and clinical judgement and is shown in figure 5.16.

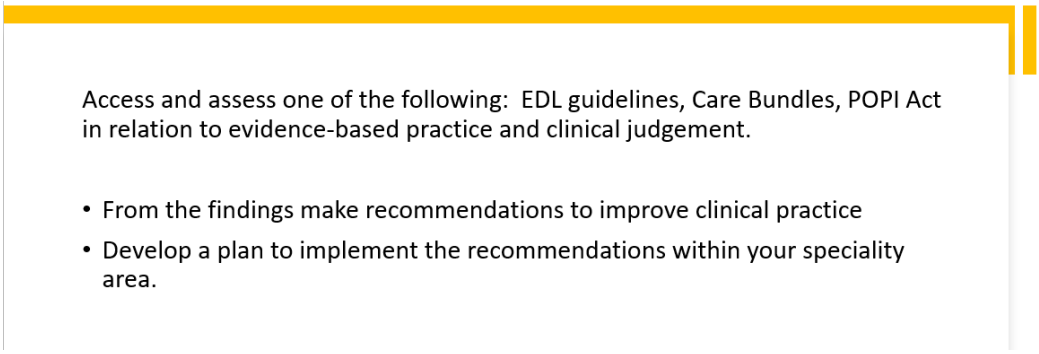

Figure 5.16 Capstone assignment: Research Practitioner

5.4.9.5. Concept 5: Practice Development

Development suggest improvement and through promoting and advocating a role showing the impact it has on the person, the profession and the practice environment might initiate growth. To develop and therefore improve health outcomes requires the application of lifelong learning strategies. The assignment therefore focusses on continuing education and provide an opportunity for the student to integrate understanding of lifelong learning and practice development to advanced practice nursing and is shown in figure 5.17.

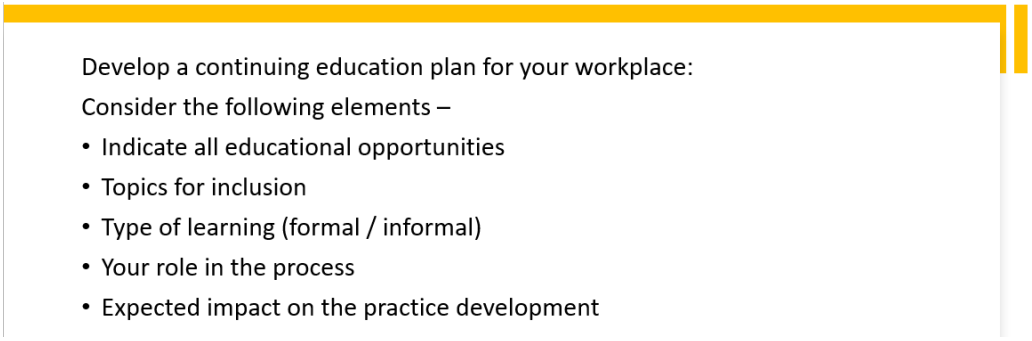

Figure 5.17 Capstone assignment: Practice Development

5.4.9.6. Final Capstone portfolio

Figure 5.16 illustrates the final Capstone assignment which provide an opportunity for the student to reflect on their journey in Scholarship to become a Nurse Specialist. The objective of this final assignment is to internalise, integrate and translate the understandings, generalisations and competencies gained from all the concepts in the Scholarship for APN course.

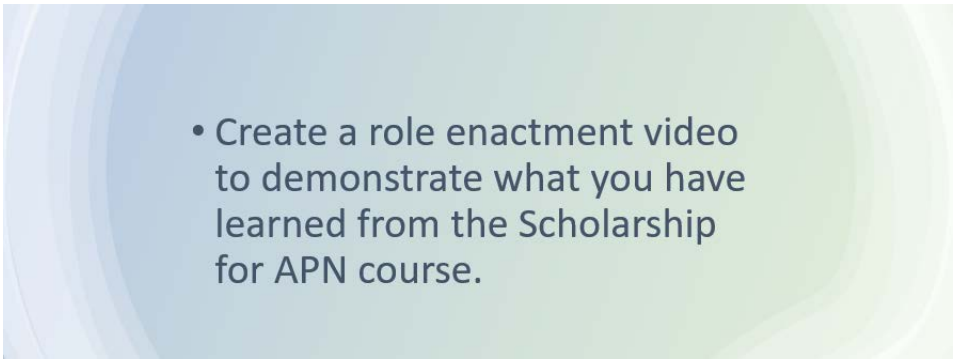

Figure 5.18 Concluding capstone assignment: Scholarship for APN course

5.5. Conclusion

This chapter described the third phase of the DDR process, the development of a prototype of the artefact: Teaching plan for a course on scholarship.

The elements considered in the development process were course design, organisation of content and the development of a teaching plan. The approach of Backward Design (Wiggins *et al*., 2005 and Wiggins & McTighe, 2011) guided the overall development with an emphasis on preparing with the end result in mind. Starting with what evidence the

student has to present to demonstrate proficiency ensured alignment between the learning goals, the assessment and the learning activities.

The next chapter which includes the fourth phase of the DDR process, and the testing of the artefact, will be described.

Chapter 6. Testing the Artefact (Phase 4)

6.1. Introduction

The fourth phase of the DDR process, the testing of the artefact, seeks to test if the developed artefact provides a suitable solution for the identified problem (Ellis & Levy, 2010). The process of testing the artefact involves the expertise of stakeholders ranging from experts to potential users resulting in the refinement of the artefact (van den Akker *et al.*, 2010).

The identified problem, the introduction of the new APN category of Nurse Specialist in the South African context, initiated the development of the artefact, namely the Scholarship course for APN (Chapter 5), aimed at preparing professional nurses academically to take on the role of Nurse Specialist (APN). The need to ensure a feasible, appropriate, and acceptable course has been developed necessitates evaluation led to this phase of the DDR process to test and evaluate the artefact (Elwy *et al.*, 2020).

This chapter will describe the processes involved in testing and evaluating the artefact in the sections below starting with an overview of curriculum evaluation; developing a tool to evaluate the course; the data collection procedure, and finally discuss the changes made as a result of the inputs from the participants.

6.2. Curriculum evaluation

Curriculum evaluation is an integral part of the curriculum development process and is done to evaluate the quality of the curriculum (Li & Yu, 2018). In doing so, it ensures that standards of the institution and of the regulating body are met (Billings and Halstead, 2016; Songserm *et al.*, 2018 and Middelton & Maroney, 2019). It should not be a once off process but is required to continually assess the integrity, rigor, and the fitness for purpose, of the learning activities, and therefore of the curriculum (Billings & Halstead, 2016 and Butcher *et al.*, 2019). Evaluation of a curriculum is aligned to a research activity in that it is systematic and involves data collection, review and feedback (Kirwin *et al.*, 2019) offering possibilities to strengthen the quality of the curricular products such as the teaching plans. This idea is echoed by (Yang 2017) who refers to curriculum evaluation as a never-ending process which renders a dependable report of the curriculum development attempt. Li and Yu (2018) identified three phases in the evaluation of a

curriculum, viz the evaluation of the curriculum design, the curriculum implementation and the curriculum effect and point out that curriculum design, although an important aspect in determining the quality of a course, is largely overlooked in evaluation processes.

Curriculum evaluation takes place in various stages of the curriculum design and development process, and although it is a continuous process the quality of the curriculum should be ensured throughout (van den Akker *et al.*, 2010; Yang, 2017; Li and Yu, 2018 and Kirwin *et al.*, 2019). Quality assurance involves specific criteria to be met and Li and Yu (2018) describe four (4) quality assurance focus areas as it applies to developing a system for curriculum evaluation:

- Process – the evaluation methods should place more emphasis on the process of curriculum evaluation than merely evaluating the final outcome or product.
- System – the choice of evaluation methods should be informed by a systematic process of identification, analysis, and design of the curriculum to pinpoint factors influencing quality.
- Continuous improvement – the ultimate goal of curriculum evaluation should be to improve the quality of the process and the product.
- Fact-based – decisions informing the development of curriculums and evaluation should be based on evidence to make it relevant for the context.

Further to describing the quality assurance focus areas, Li and Yu (2018) identified 3 stages in the curriculum development process which requires different curriculum evaluation approaches. The curriculum design, comprising of the curriculum content, the curriculum plan and the teaching and learning methods, is the first stage, followed by curriculum implementation with a focus on the teaching and learning processes and last the curriculum effect which analyses the student performance.

It is imperative when developing an evaluation system to consider the stage of curriculum evaluation as the purpose of the evaluation will change accordingly; described by van den Akker *et al.* (2010), curriculum evaluation is threefold and entail *analysis evaluation* which provides confirmation of the design decisions; *formative evaluation* aimed at improving quality during the development of the curriculum before implementation and *summative evaluation* which is considered a conclusion of the development process measuring the outcome or impact of the curriculum after implementation.

To ensure the quality is maintained, curriculum evaluation should employ specific techniques or methods to provide structure to meet the evaluation objectives (Iwasiw *et*

al., 2009 and de Vos *et al.*, 2017). Ellis and Levy (2010) and van den Akker *et al.* (2010) describe the evaluation or testing of an artefact in their respective studies and highlighted from both is the importance of having set criteria against which the artefact will be tested. Criteria are important for any evaluation process as judgements are made based on these criteria which ultimately informs decisions to refine and revise the curriculum (Iwasiw et al., 2009; Hussain *et al.*, 2011 and Billings & Halstead, 2016).

Billings and Halstead (2016) suggest evaluation methods such as internal and external review from peers and other educational or curriculum experts to test the curriculum structure and content for accuracy, completeness and fit for purpose. Ignatavicius (2019) have the same opinion as Billings and Halstead (2016) and states curriculum products can be evaluated through peer review with the focus on: congruence with objectives; appropriateness; content scope and depth; organisation and structure; and clarity. Iwasiw *et al.* (2009) support formative evaluation during the design and development phase and indicates evaluation methods might include: qualitative and quantitative methods as well as data sources such as faculty, nurse leaders and experts who can provide valuable information.

Formative evaluation, an improvement and accountability orientated evaluation process, has been indicated as the most appropriate evaluation process to be used during the curriculum development process and serves to provide feedback in relation to standards (Iwasiw *et al.*, 2009). Although the emphasis of formative evaluation is more on feasibility, acceptability and utility rather than effectiveness it still requires a systematic process to ensure the improvement of quality (van den Akker and Verloop, 1994; Nieveen and Folmer, 2013; de Vos *et al.*, 2017 and Elwy *et al.*, *2020*).

Formative evaluation is usually followed by a summative evaluation to determine the effectiveness of the developed curriculum. As this course, being developed, will only be implemented on completion of this study only formative evaluation is possible with the focus on the curriculum content, plan and teaching methods. The other aspects will be evaluated in post-doctoral work. The methodology applied to describe the evaluation process is discussed in Chapter 2.

6.3. Workshop proceedings

Chapter 2 described the methodology used in the evaluation of the quality of the teaching plans, which were done by means of a workshop which facilitated the data collection with the postgraduate lecturers at the research setting. A workshop is a method of gaining consensus through discussion and enable the combination of qualitative and quantitative evaluation methods.

In this section a description of the workshop proceedings in terms of the briefing and explanation of the evaluation process are presented which lead into the qualitative findings which are reflecting the discussions of the major changes to be implemented on the teaching plans.

6.3.1. Briefing the participants

The participants were welcomed by the researcher, who facilitated the workshop. Upon arrival, each participant was presented with a folder containing the documents and material needed for the workshop.

The researcher first provided an overview of the development process of the teaching plans. Concept-based curricula were not previously used at the research setting the researcher started with a clarification of terms and concepts which guided the development process to strengthen the participants' understanding of concept-based curriculum:

- The first concept explored was 21st Century Learning, to which the participants' responses indicated an understanding in that it is student-centred getting them to explore their learning and become reflective life-long learners through critical thinking problem solving and collaboration.

- Boyer's Scholarship Model was explored next, the participants indicated they have "*heard*" of the model and wanted to be reminded of what the model entails. The researcher provided a brief explanation of the four (4) strands viz:

    - Scholarship of Discovery – how do we get to know, how do we explore new ideas and information.

    - Scholarship of Integration – making sense of the information with an emphasis on interdisciplinary learning and collaboration.

- Scholarship of Application – applying information in real world contexts.
- Scholarship of Teaching – how do we teach others and how do we reflect on our own practices moving forward. The researcher indicated reflection was linked to the scholarship of teaching within the teaching plans.

Participant 3 (P3) questioned the relevance of using the Boyer scholarship model and its use was rationalised in that it is widely used in nursing education globally.

- The participants were not familiar with Wiggins and McTighe's (2011) Backward Design and the researcher gave a short overview describing the three steps: desired results, evidence and teaching activities.

The researcher then explained the concept-based specific elements of the teaching plan, which are not usually reflected in lesson plans, guided by Erickson *et al.* (2017) and Giddens *et al.* (2020), and indicated what is expected from the participants in making judgements to evaluate these elements included in the teaching plan.

- Have a catchy title to hook the student and engage thinking. The researcher suggested when the participants evaluate the title of each unit to judge the title if it serves as a hook to engage the student.
- The conceptual lens focusses the learning on expected outcomes and places the intended learning into context. The research supervisor (RS) elaborated on the conceptual lens stating there are various lenses through which we can explore a concept, the lens then becomes the teaching focus which the educator must have an understanding of to present the learning experiences. Participants, when evaluating this aspect, ought to look at the appropriateness of the chosen conceptual lens.
- Conceptual question is used during facilitation of the learning allowing the student to relate their thinking about the conceptual question to the learning events. The researcher highlighted if the participants find inadequate emphases is placed on the application of the conceptual question it should be raised to affect changes.
- Inter-related concepts allow the recognition of relationships and transfer of understanding across concepts and the inter-related concepts should be evaluated if the relationship of the concepts is appropriate for clinical courses.

Opportunity for questions were afforded to the participants. Participant 4 (P4) wanted clarity around the learning goals: "*Those learning goals, are they teacher directed, or can the student come up with their own learning goals?*" Participant 1 (P1) responded stating: "*It is quite important to keep in mind this is a programme for an award, and you can't have an imbalance. The personal goals are something you will encourage but you will need to keep focus on the programme goals.*"

The objective of the workshop, to evaluate the teaching plans, was highlighted again and the process for evaluating the quality of the teaching plans were introduced by the researcher. The researcher, before explaining the process, drew the attention of the participants back to the programme outcomes to ensure the teaching plans when being evaluated are aligned to the programme outcomes as stipulated by the SANC (2013). A short discussion ensued around the programme outcomes and the RS reinforced that the programme outcomes guide ***all*** the courses within the postgraduate diploma programme and not only this one course.

6.3.2. Explanation of the evaluation tools

The researcher explained the evaluation tool stating there are five (5) sections with criteria to be considered during the evaluation. Participants were instructed to rate the criteria in relation to their nursing speciality. Ratings could be allocated according to: *Does not meet my expectation* indicating the course is not appropriate, relevant or feasible for the specific speciality; *Needs improvement / modification* indicates major changes have to be made before further review; *Meets my expectations with minor changes / additions* which will be an indication that the course is appropriate, relevant and feasible for the specific nursing speciality and finally *exceeds my expectations* indicates the teaching plan is of good quality.

Each participant received four (4) coloured cards each representing a rating value as shown in figure 6.1. The researcher explained after completing and collection of the evaluation tool, a final vote will be done which represents the participant's overall perception of the teaching plan. The instruction was to show a card representing their answer simultaneously when prompted.

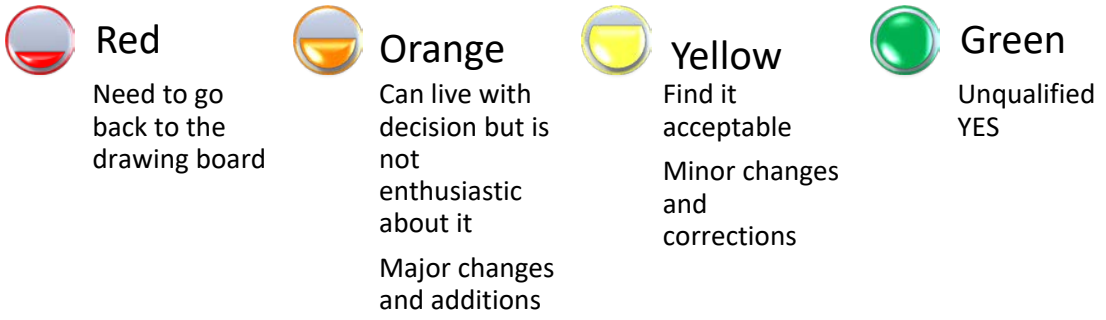

Figure 6.1 Final Voting Cards

This concluded the briefing of the participants which provided some background information and an explanation of what is expected from the participants during the evaluation process.

The discussions around the teaching plans are presented in 6.4 and in 6.6 the results of the evaluation tools are presented.

6.4. Discussions for consensus

In 6.4.1 – 6.4.5 the discussion around the concept teaching plans is reflected presenting the dialogue between the participants to reach consensus on teaching plans presented.

6.4.1. Teaching plan 1: Advanced Practice Nursing

The first teaching plan 'Advanced Practice Nursing' is an introduction to APN, which is a relatively new concept within the South African context, aimed to create a common understanding amongst students of the concept APN. Two aspects of this teaching plan that were deliberated in detail with regards to the relevance within the South African context: the concept title and the exemplars are reflected in table 6.1. The other elements were looked at and received affirmative comments from the participants which indicated agreement.

Table 6.1 Discussion of Concept APN

Teaching plan element	**Discussion**
Concept title: *Advanced Practice Nurse*	The participants raised a concern stating the SANC has a different understanding of APN where the SANC recognises Specialist nurses and not Advanced Practice Nursing, which is different to what is being presented in the teaching plan. The misconception around APN was demonstrated by the comment of P1 who referred to the SANC position statement: "*with the Advanced Practice Nurse the current regulation don't refer to Advanced Practice Nurse they refer to Specialist Nurse, from the international perspective it is aligned but South Africa has taken a different direction. Do you have a clear definition of the specialist nurse so that it is clear what a specialist nurse is and what an advanced practice nurse is?*". The rationale for using the term Advanced Practice Nursing in APN is an umbrella term taken from the ICN definition, which includes the Clinical Nurse Specialist (within various speciality fields) and the Advanced Nurse Practitioner, which does not exist in South Africa. However, in South Africa we are aiming to train specialist nurses under the umbrella of advanced practice nursing and not advanced nurse practitioners. The suggestion from the participants was to change the concept title to '*advancing practice in nursing'* rather than '*advanced practice nursing*', however, the researcher should find evidence from the South African context to inform the decision to use of either Advanced Practice Nurse or Advancing practice in nursing.
Exemplars: *Clinical Nurse Specialist (APN) in:* • *Private practice* • *Community* *Experienced APN entering a new setting* *Newly qualified APN* *Nurse educator* as APN	The use of exemplars was questioned as it was not evident from the teaching plan, yet it is listed. P5 suggested: "*incorporate the exemplars in the 'application' phase of the Boyer model in the learning activities*." P1 indicated there is a difference between private practice and the private sector and should be corrected. All nurses within the South African context are practitioners and have a specific level of autonomy, accountability and responsibility which might vary depending on the practice environment and the role of the nurse. This was noted and confirmed initially the term 'private practice' referred to the private health sector, although after discussion the students should be exposed to think about practicing in a private practice setting. The exemplars would therefore need to reflect both aspects: private practice and the private health sector.

This concluded the discussion of the first teaching plan. Time was afforded to complete the evaluation tool for the concept which was followed by a final vote (discussed in 6.6).

6.4.2. Teaching plan 2: Collaboration

The teaching plan for "Collaboration" was reviewed by the participants, no major concerns were raised, however, participants suggested alternatives for some of the learning activities, the exemplars and assessment. The other elements of the teaching plan were met with confirmation statements. The suggestions from the participants are captured in table 6.2.

Table 6.2 Discussion of Concept Collaboration

Teaching plan element	**Discussion**
Learning activities: ***Discovery (week 1)*** *Write a story about a time when collaboration failed describing how your personal experiences influence your attitudes of collaboration. Walk around and read stories to identify key terms, attributes and characteristics of collaboration.* ***Teaching / Reflection:*** *Draw algorithms to indicate how collaboration can improve patient care in a mass casualty incident. (learning focus – How does your attitude towards collaboration influence the teams' performance).*	Within the learning activities, the wording of the first activity is confusing and might be interpreted incorrectly. P3 suggested: "*Students to read the written stories and identify key terms etc*." Other suggestions from the participants were to use prewritten scenarios for the students to unpack (P1) or to identify a real problem and do a role play using the principles of the TV programme "The Apprentice" through which the students identify the attributes and characteristics of collaboration. (P4). The learning activity, drawing an algorithm to indicate how collaboration can improve patient care, under the teaching and reflection, does not speak to the learning focus. (P3). P1 indicated: "*the learning focus should be on their role and how they perceive their role within a team*". The suggestion was therefore to change the learning focus to understand their role within a team to improve patient care which can be achieved by the learning activity.
Exemplars: *Mass casualty* *Inter-professional development* *M&M meetings*	The forming of partnerships with patients as a healthcare consumer should be more explicit. P1 commented that the exemplars were focused on the healthcare practitioner and did not include the family and the patient. A suggestion was to include "*breaking bad news*" as an exemplar. This was supported by P5: "*the patient should be part of the decision-making process and it would be addressed with the inclusion of the "breaking bad news" exemplar*".

Assessment: *Evaluate the team performance of a team using the Drexler Sibbert model.*	The level of collaboration and the various partners in collaboration is different for each situation and P1 suggested to maybe contextualise the assessment that the student must evaluate a team performance within a specific speciality.

6.4.3. Teaching plan 3: Clinical Leadership

The participants focussed their discussion (table 6.3) on the learning activities, highlighted in the discussion was how the participants reflected on the content presented and drawing on their own experiences from practice environments which informed their contributions and suggestions illustrated by a comment from P5: "*… it is reflective of what is happening in practice. In clinical practice there is quite a lot of you will do it the way I was taught."*

The value of the Clinical Leadership concept was further underscored by a comment from P1: "*this is so important, getting them to think and gain insight. It is sad but nurses are the most disempowered people…*"

Table 6.3 Discussion of Concept Clinical Leadership

Teaching plan element	**Discussion**
Learning activities: ***Pre-learning:*** *Just because an idea sounds good does it mean you should do it? (Learning focus – explore the characteristics of leadership)*	This is another conceptual question and not a learning focus. P3 stated: "*for me that speaks more about motivation and persuasion*" and suggested it to be moved to fall under the application section where the students will engage in activities related to empowerment and persuasion.
Discovery (week 1) *The Alien at Handover: Imagine yourself as aliens observing a patient handover. Point out unusual human social norms and explain it to the beings of your imaginary planet.*	The purpose of this activity is for students to explore and challenge behaviours that we take for granted but never question. P3 suggested to change from 'handover' to be at a dinner as students will be more comfortable to explore cultural differences and share why we do things in a specific way. P4 added: "*it can then be related back to nursing activities such as the hand over to challenges certain practices*".
Application (week 4 – 5) *Identify types of people and describe how you will communicate with them to motivate and influence the person to change.*	*P3 indicated "this speaks loudly to the Esidimeni incidence as you have all the types of people and it is something that is given to you that is real."* P1 added to this "*students should be aware of current events and this activity provides an opportunity to stimulate forward thinking and linking to the ethical-legal framework.*"

Teaching / Reflection *Draw a concept map to illustrate the roles of a manager, a leader and change agent within the NHI.*	The suggestion, therefore, to relate the activity directly with the exemplar of Esidimeni or a current event reflecting ethical dilemmas. A suggestion was to include the leadership function of the SANC and have a debate on leadership in nursing in general, identifying with role models and justify why. P1 stated: "*with this activity the students can explore the level of accountability, autonomy and responsibility of role players and students can relate to self*".

This concluded the discussion around the clinical leadership concept and the participants completed the evaluation tool and the final vote was recorded.

6.4.4. Teaching plan 4: Research Practitioner

The concept of Research Practitioner was introduced by the researcher clarifying the concept title. The level of the programme (postgraduate diploma) does not require the student to conduct a research project, however, as an APN you are required to implement evidenced-based practice. Evidenced-based practice is embedded in research and requires an understanding of the processes on the attainment of evidence, but more importantly how to use the evidence in practice.

The learning activities were the focal point of the discussion shown in table 6.4.

Table 6.4 Discussion of Concept Research Practitioner

Teaching plan element	Discussion
Learning activities: ***Discovery week 1:*** *Puppet on a string: Discuss nursing problems you experience in practice while making a puppet to represent the type of nurse you are. Use your puppet to present your identified problem.*	Initially this activity was viewed with curiosity "*this sounds interesting*" (P1), however, with a deeper look into this activity the participants were not convinced of the appropriateness to research. The researcher tried to rationalise the activity describing the purpose of the activity is to engage students in a creative way to freely discuss problems in the practice setting. P3 justly responded and indicated the activity does not match the learning objective of identifying researchable problems stating: "*It is a novel and creative idea, but it is conflating a few issues, it addresses the self and not identifying problems*". The participants at first tried to justify the inclusion of the activity P1: "*When working in a practice setting, you sometimes feel like a puppet on a string, as you can't change practice you just have to do what you are told*", which highlights a link to change in practice but not the identification of a problem as indicated by P3. "*Speaking through your puppet to tell your story*" (P5) was another attempt to justify the use, however, again does not link to identification of the research problem. All agreed the activity is not suitable for the context it is currently used. Ideas were pondered to guide the researcher in choosing a replacement activity such as: create a storyboard or collage illustrating your problem; play a game such as myth busters, based on the TV show where students have to convince the audience of the validity of the myth.

Notwithstanding the one learning activity (table 6.4) that has to be changed, the teaching plan for this concept was acceptable for the participants. Minor grammatical issues were indicated by the participants before they completed their evaluation tool and did the final vote on the teaching plan.

6.4.5. Teaching plan 5: Practice Development

The final teaching plan evaluated was met with acceptance of the content and the learning activities. The discussions emphasized the importance of preparing the students to implement and promote the role of APN in practice settings. The discussions depicted in table 6.5 reflects the importance to the participants of understanding the regulatory framework and knowing where you as a practitioner fits into the system.

Table 6.5 Discussion of Concept Practice Development

Teaching plan element	Discussion
Learning activities: ***Discovery (week 1)*** *Carousel exercise: Review regulations, policies and Acts related to APN. Develop a concept map to illustrate the parameters for practice of an APN.*	The importance of the learning activity aimed at challenging the students to engage with the regulatory framework and their role within that framework was affirmed by P1 stated: "*Acts and regulations are fixed and not much that can be changed, but the students don't know… don't have in-depth knowledge of regulations and it's an important aspect to challenge the student to identify what they would like to change in order to practice. The students must reflect on do they agree that the Regulations, Acts, and policies apply to their practice or is there something that needs to change. Their recommendations will show their involvement in policy.*" Supported by P3: "*Students can show original thinking in considering ways of working around these rules, manipulating the framework within the rigidness of the system*".
Teaching / Reflection *Draw an organogram showing where you as an APN fit into your organisation with justifications*	P1 highlighted the necessity of doing the organogram stating: "*Some students are frightened to go out of their comfort zone when asked to do something they are reluctant and will say that this is how it's been done. They don't challenge anything*". P4 added: "*We get a title but the workplace don't allow us to function in that capacity.*" This underscore the importance of the activity to force students to reflect on their position within an organisation and provide an opportunity for them to challenge the status quo. Which relates to their sphere of influence. If the sphere of influence is combined with the organogram the participants recognised the possible impact of the activity as reflected by P1: "*Based on their contribution to practice, they should think how would I reorganise the organogram and think about the impact that will have on practice".*

The last aspect in the discussion was around the final capstone assessment. The idea of the role enactment video sparked creative suggestions to enhance the assessment. One such suggestion was to video record interviews with candidates applying for an APN job, which would require the student to identify criteria for the interview based on the job specifications and requirements. P1 enquired about the sequencing and placement of this concept as she stated: "*this is an important and heavy concept*". The researcher replied that this concept will be presented last as it concludes APN but also expects the student to integrate their learning from all the other concepts. This concluded the discussion around the teaching plan, followed by the participants completing the evaluation tool and final vote.

6.5. Wrap up

The teaching plan for the concept Practice Development was the last teaching plan presented. The researcher explained the way forward in the teaching plans will be edited to incorporate the suggestions and changes from the participants. The revised teaching plans would then be circulated via email together with a member check form for final agreement. The only teaching plan that required major changes was the Research Practitioner and the researcher requested the participants when reviewing the revised documents to give special attention to this particular concept.

The participants were thanked for their time and valuable contributions. P5 thanked the researcher for presenting interesting learning activities which has inspired her. P1 also added the workshop has provided a different view on developing courses and she has a better understanding of concept-based curriculums which will be helpful with the development of the remaining courses on the postgraduate diploma programme.

6.6. Quantitative results:

The changes to be affected on the teaching plans were discussed in 6.3 during the workshop and summarised at the end of each concept. The results being discussed in this section are the completed evaluation tools to provide an overview of each element evaluated and a summary of the final voting that took place at the end.

6.6.1. Evaluation tools

The results of the evaluation of the teaching plans are reflected below. A summary score (Equation 1) was calculated for each criterion within the five (5) sections as follows:

Equation 1 Calculating summary scores

$$\frac{\text{Sum of participant scores}}{\text{Number of participants}}$$

The first section was the ***Organisation and Structure*** which had five (5) criteria. Figure 6.2 represents the summary score.

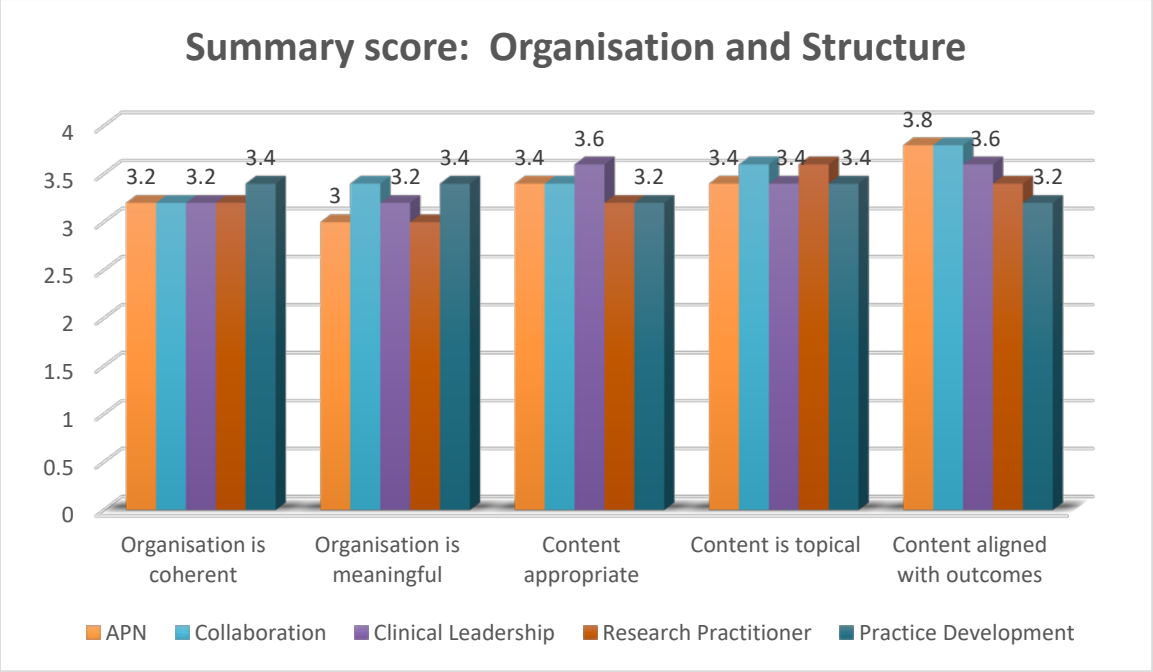

Figure 6.2 Results: Organisation and Structure

With an average score of 3.36 indicates the organisation and structure of the teaching plans of the five (5) concepts were acceptable to the participants. The criteria for this section consistently scored a rating of 3+ showing that the criteria met the participants' expectations with minor changes and or additions. The coherency and meaningfulness of the content structure scored the lowest average (3.2) which might be an indication of the participants' understanding of a concept-based curriculum. This is a new approach being introduced within the research setting; therefore, it can be expected they will not be totally comfortable and familiar with the structuring of a concept-based curriculum teaching plan.

The ***Learning Goals*** was the next section and had two (2) criteria to be evaluated and is illustrated in figure 6.3.

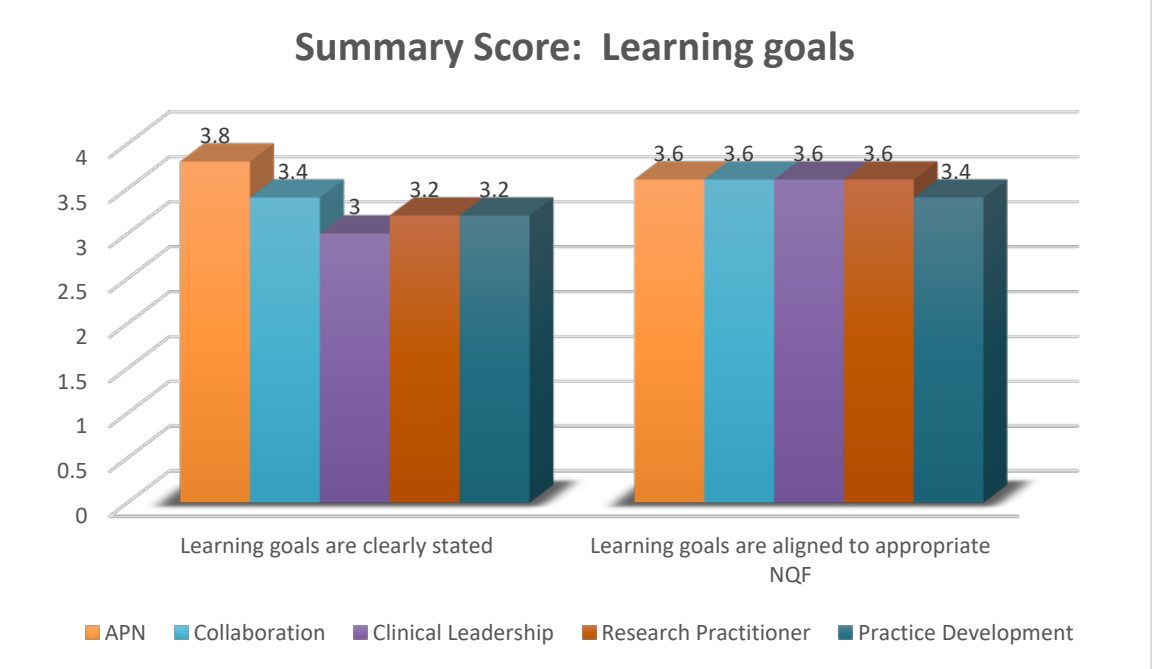

Figure 6.3 Results: Learning Goals

The participants viewed the learning goals to be clearly stated and aligned with the NQF level required for a postgraduate diploma. The average score for the learning goals criteria was 3.44. The stating of the learning goals scored lower across the concepts than the alignment and might be due to the participants being used to formulating learning outcomes and objectives rather than broader learning goals.

The section on the ***Learning Activities*** was made up by four (4) criteria and the responses of the participants are shown in figure 6.4.

The average score for the learning activities came to 3.4. The second criterion was rated the highest for all the concepts and received an average score of 3.51. Whereas the participants were not totally convinced that the activities provide opportunities for the students to reflect on what they have learnt or not (average score 3.32).

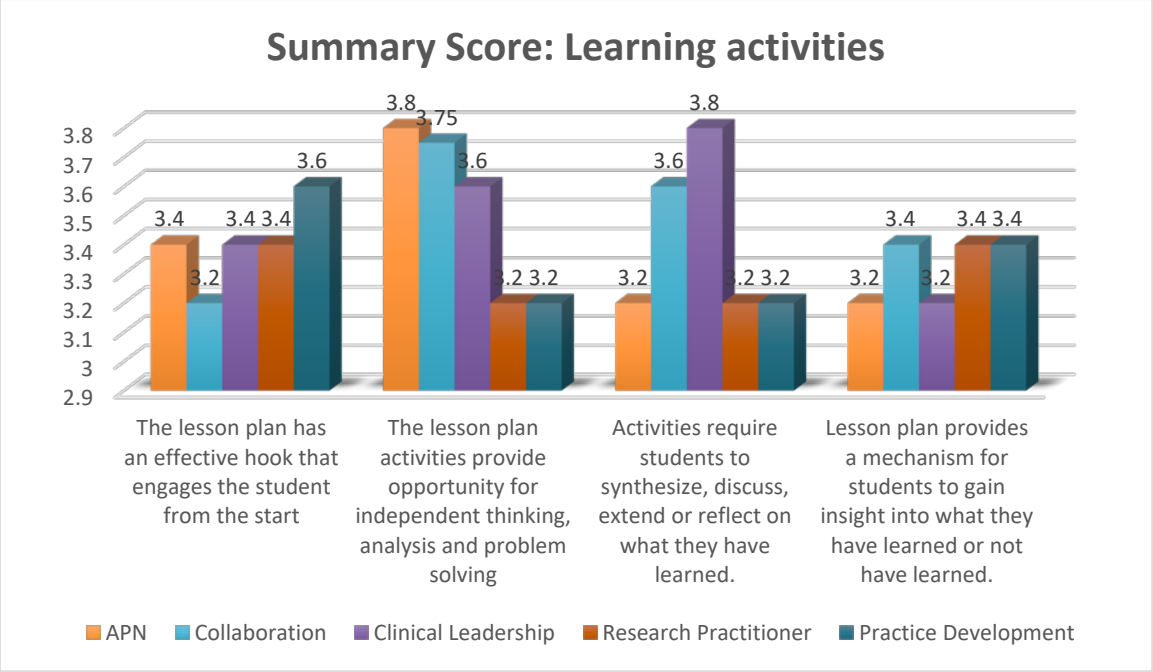

Figure 6.3 Results: Learning Activities

Ease of use by others only had one criterion and received an average score of 3.08 which is indicative of meeting the participants' expectations. One participant did comment during the workshop that she had difficulty in rating this aspect because the teaching plan is not implemented or used yet. The results are shown in figure 6.5.

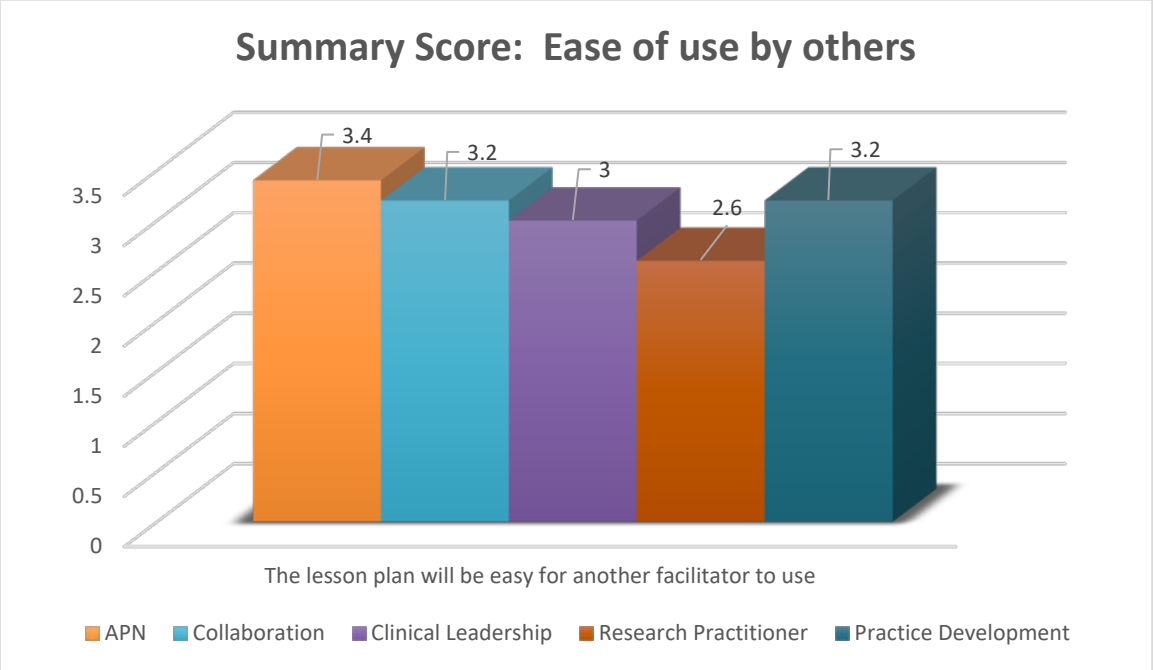

Figure 6.4 Results: Ease of Use by Others

The concept of Research Practitioner received the lowest score on this aspect and might be because research and evidence-based practice is perceived to be complexed and challenging to teach.

The final section of the evaluation tool was ***Assessment*** and the results are shown in figure 6.6. This section had two (2) criteria which the participants had to evaluate. The average score for the assessment criteria was 3.24. The assessment activities for the concept of Clinical Leadership scored the lowest of all the concepts, although still acceptable to the participants minor changes and adaptions are indicated. The concept of Practice Development scored the highest in both criteria (3.4) and from the data set two (2) participants rated the assessment as exceeding their expectations.

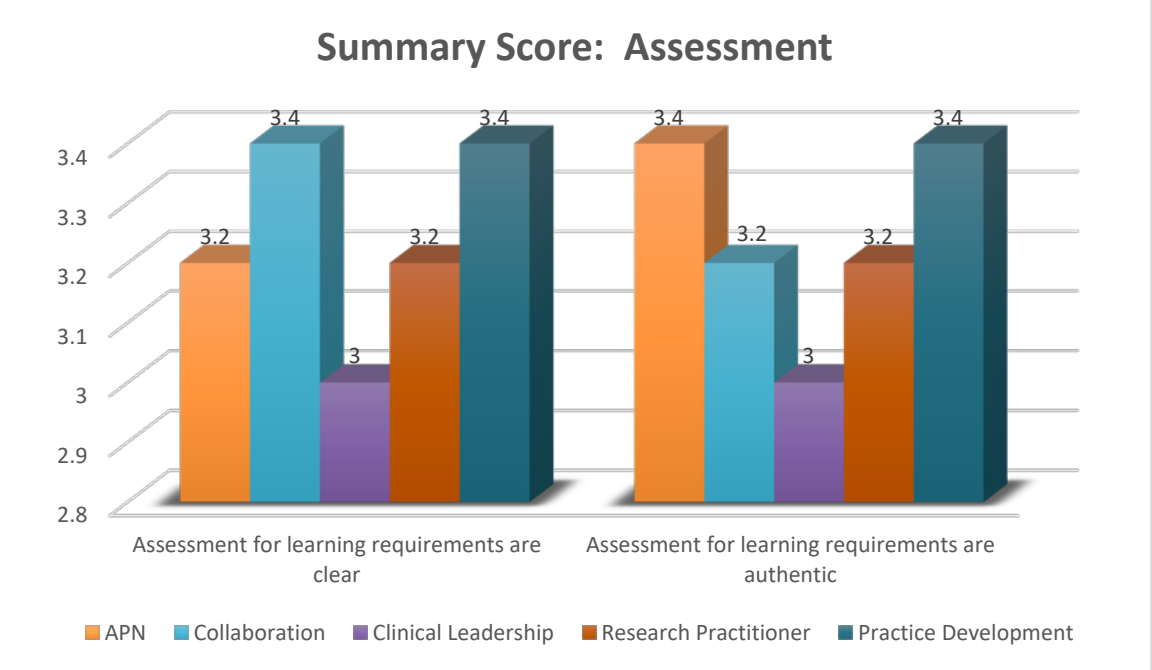

Figure 6.5 Results: Assessment

After the evaluation tools were completed the researcher wanted to gauge the overall sense of acceptance of the teaching plans. The final voting with cards aided to achieve this goal.

6.6.2. Summary of final voting

The evaluation results revealed an overall satisfaction with the teaching plans, however, minor changes in most teaching plans were suggested, with an exception of the teaching plan for the concept: Research Practitioner. The final voting scores are illustrated below.

The Advanced Practice Nursing concept was the first to be voted upon and the final vote is shown in figure 6.7.

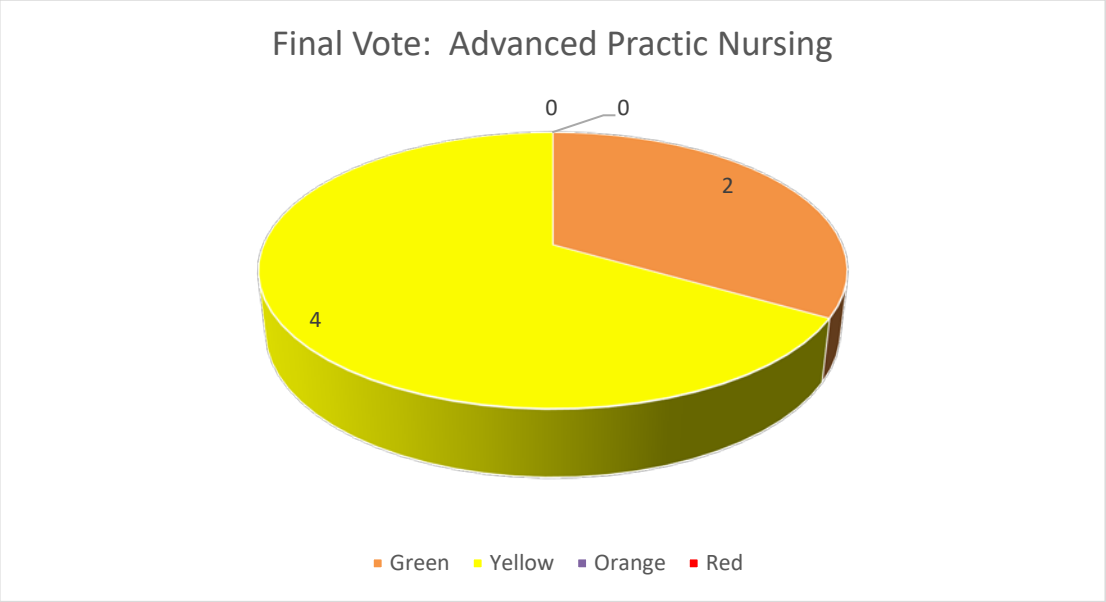

Figure 6.7 Final Vote: Advanced Practice Nursing Teaching Plan

The participants indicated an overall satisfaction with the teaching plan for the first concept, Advanced Practice Nursing. The majority voted with a yellow card suggestive of the participants finding the teaching plan acceptable.

Figure 6.8 represents the final voting for the concept of Collaboration. The concept collaboration was unanimously voted as acceptable with minor changes.

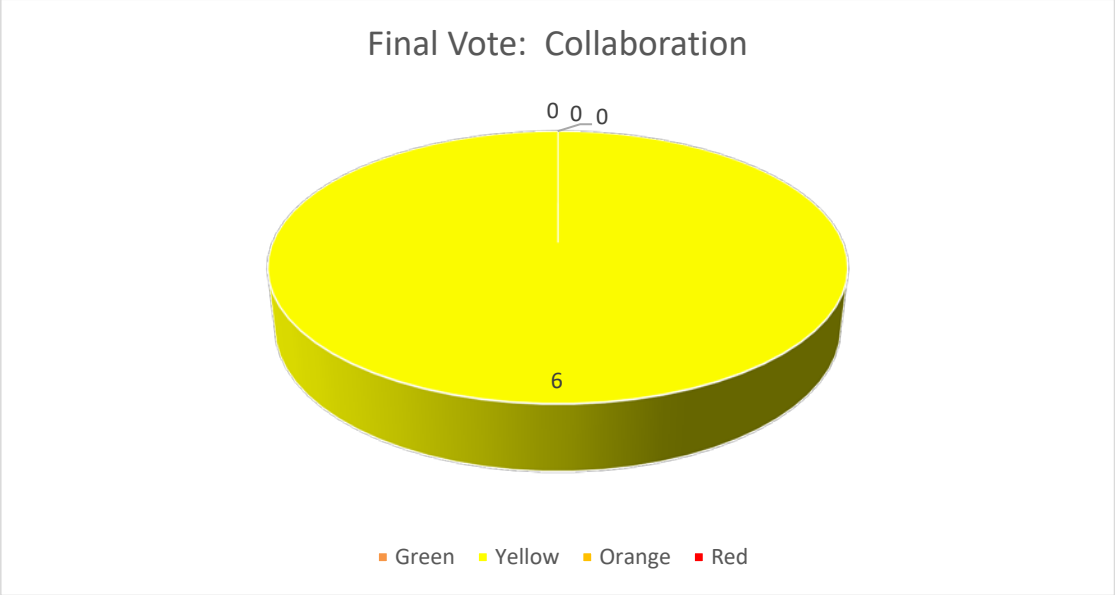

Figure 6.8 Final Vote: Collaboration Teaching Plan

The final vote for the concept of Clinical Leadership is shown in figure 6.9.

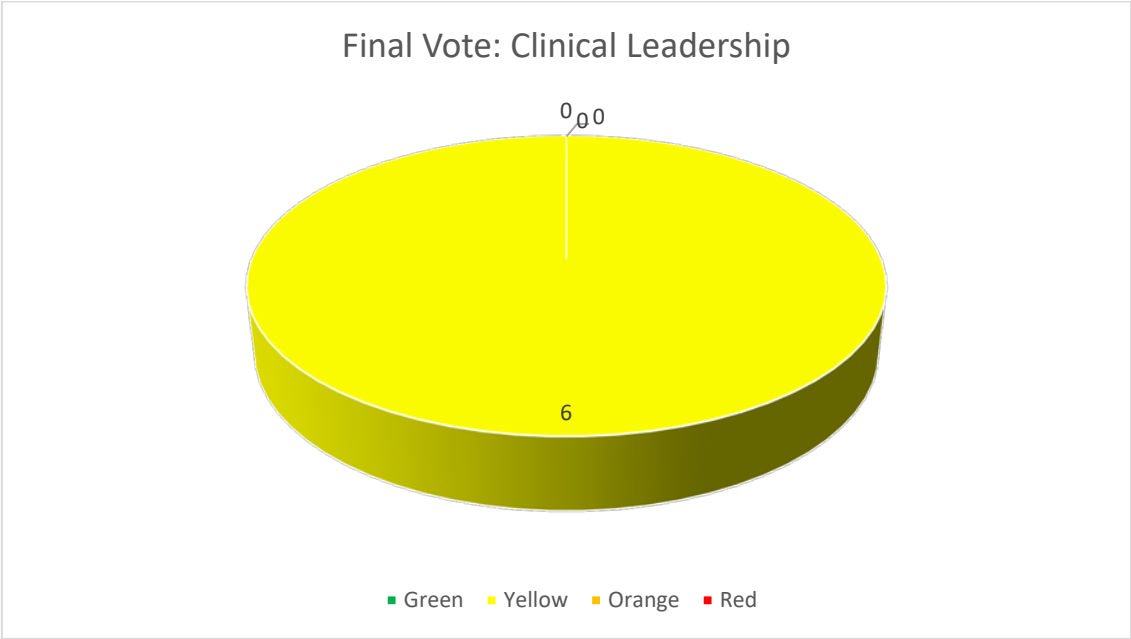

Figure 6.9 Final Vote: Clinical Leadership Teaching Plan

Similar to the Collaboration concept, the teaching plan for the concept Clinical Leadership were also found to be acceptable with minor changes.

Figure 6.10 illustrates the final vote for the concept of Research Practitioner.

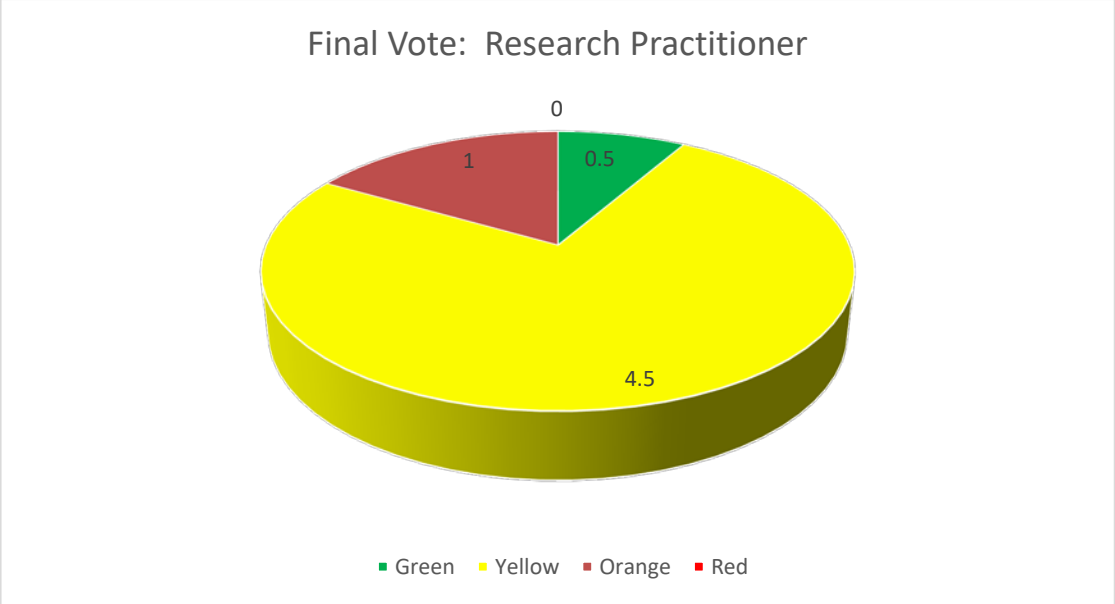

Figure 6.10 Final Vote: Research Practitioner Teaching Plan

The final vote for the concept of Research Practitioner shows one participant splitting a vote into unqualified yes and find it acceptable. One participant indicated major changes are required for this teaching plan.

The last concept's, Practice Development, final vote is shown in figure 6.11.

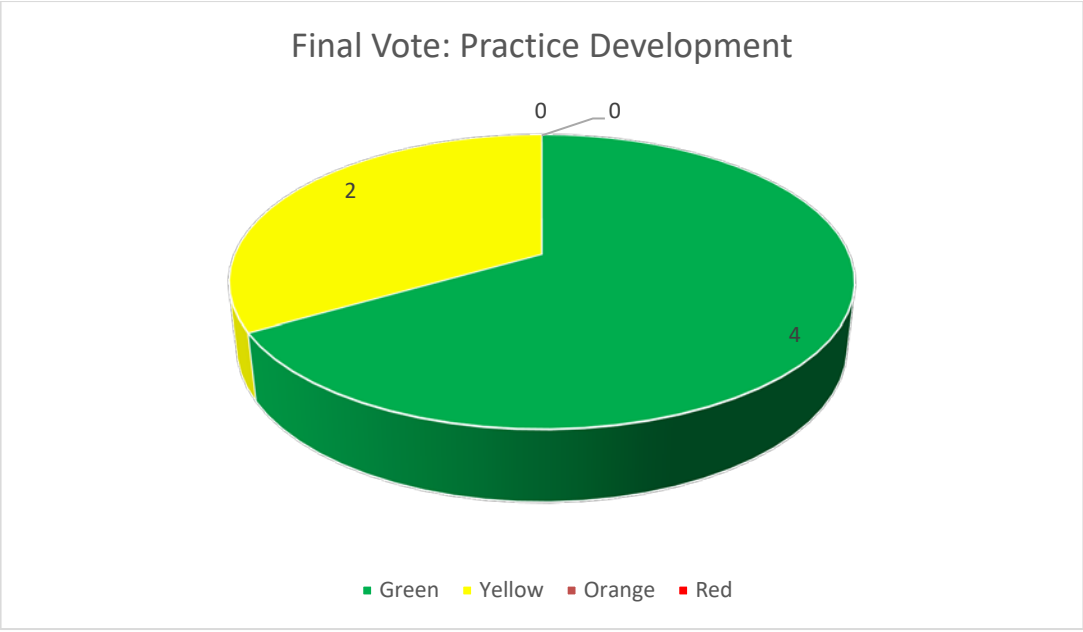

Figure 6.11 Final Vote: Practice Development Teaching Plan

The majority of participants voted with an unqualified yes to this concept teaching plan, with two participants indicating their satisfaction with minor changes.

6.7. Final Approval

Upon conclusion of the workshop the researcher reviewed each participants' teaching plan which was collected during the workshop. Comments and suggestions were compared to the discussions during the workshop (transcript) and changes were affected on each teaching plan. The two pertinent issues addressed on the teaching plans were:

6.7.1. Teaching plan 1: Advanced Practice Nursing

During the workshop it was indicated that the concept name Advanced Practice Nursing might not be applicable in the South African context and the researcher had to find justification for the use of this term. The researcher consulted the SANC website and in Circular 3 (2013), the SANC described their position with regards to APN. The SANC acknowledged the definitions of APN within the international context with special reference to the ICN definitions, however, expressed the direction South Africa will be taking which is under the umbrella of Advanced Practice Nursing there will be two types of APN viz. the Nurse Specialist prepared at a postgraduate diploma level and the Advanced Nurse Specialist prepared at a master's degree level. (SANC, 2013).

The decision therefore to keep the concept title as Advanced Practice Nursing was justified within the South African context. This was communicated with the participants during the member checking.

6.7.2. Teaching plan 2: Research Practitioner

Within this concept the learning activity: 'Puppet on a String' was identified as not appropriate and the researcher had to investigate an alternative. The replacement activity is shown in figure 6.12, and attention was drawn to this activity during the member checking.

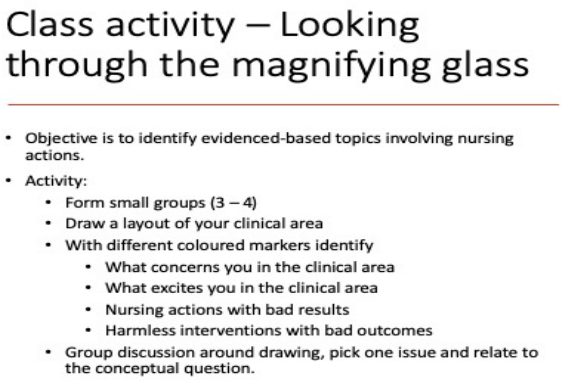

Figure 6.12 Replacement Class Activity

The concept teaching plans, with changes highlighted in yellow, were circulated via e-mail to the participants with a checklist requesting participants to confirm if their suggestions and recommendations were evident in the teaching plans.

The participants responded positively giving the go-ahead to all five (5) teaching plans to be validated by external reviewers (Chapter 7).

6.8. Observations by researcher

The purpose of curriculum evaluation is to unpack the elements of the curriculum to test if the parts fit together and to seek justification for choices and assumptions (Zhao *et al.*, 2017). For the evaluation of the Scholarship in APN course, the teaching plans were presented to lecturers during a workshop, with the objective to test for relevance and appropriateness.

The discussions embodied an exchange of innovative ideas and reflected the lecturers collaborative engagement with the evaluation process. The focus of the discussions revolved around which parts of the teaching plans should be strengthened or removed, therefore increase the possible impact of the course when implemented. Routhieaux (2015) and Voogt *et al.* (2016) accentuate the importance of collaboration to strengthen the development of quality curriculum products, but also through collaboration professional development of the collaborators are achieved as they will gain expertise in designing curricula products.

The participants, although having various experience in developing courses, became acquainted with concept-based curriculum development, which is a new approach adopted at the research site. The comments from the participants were initially focused on the technical aspects of the teaching plans, and as the workshop progressed the focus shifted to unpacking the teaching and learning activities to achieve the objectives of a concept-based curriculum.

An objective of concept-based curricula is to stimulate conceptual learning and synergistic thinking (Erickson *et al.*, 2017 and Giddens *et al.*, 2020). The depth of the discussions amongst the participants related to the elements of the teaching plan was an indication for the researcher the teaching plans are stimulating conceptual learning, as they were applying their own experiences to make meaning of the presented teaching plan.

The researcher also noted, in-service training is required to prepare the lecturers to move from traditional teaching and learning methods towards the concept-based curriculum to facilitate not only professional development but also to highlight the benefits for student learning if implemented correctly.

6.9. Conclusion

The workshop aimed to evaluate the quality of the teaching plans in terms of relevancy and appropriateness for the various nursing speciality fields. The results indicated an overall satisfaction from the participants with the presented teaching plans and can therefore be exposed to an external validation process.

The next phase of the design and development process, a validation process will be discussed in the next chapter.

Chapter 7. Validating the Artefact (Phase 5)

7.1. Introduction

This chapter aims to determine the course validity by means of an external review process of the teaching plans, yielding additional information on the achievement of quality standards, and is the fifth phase of the DDR process. Chapter 6 provided a status report on the quality of the course, based on judgements from the internal stakeholders, whereas this chapter's focus is the validation of the course with the emphasis on to what extent the course meets, or does not meet, the quality standards from the viewpoint of external stakeholders (Khan *et al*., 2019).

The validation process, described in Chapter 2, required the experts to judge the teaching plans on the principles of acceptability, appropriateness and feasibility and the results with comments are discussed below.

7.2. Results

Each criterion was judged according to whether it was acceptable (1 point), appropriate (1 point) and feasible (1 point). Points were allocated per indicator and each criterion could therefore be allocated a maximum of 3 points per expert.

The results of each aspect are illustrated in 7.2.1 – 7.2.6.

7.2.1. Organisation and structure of the teaching plans

Figure 7.1 illustrates the overall satisfaction of this aspect which consisted of four (4) criteria. The criterion "breakdown of the notional hours", was questioned in all but the clinical leadership teaching plans. One expert commented clarification is required as the hours for self-directed learning seemed excessive which brought into doubt the feasibility of the allocation of the notional hours.

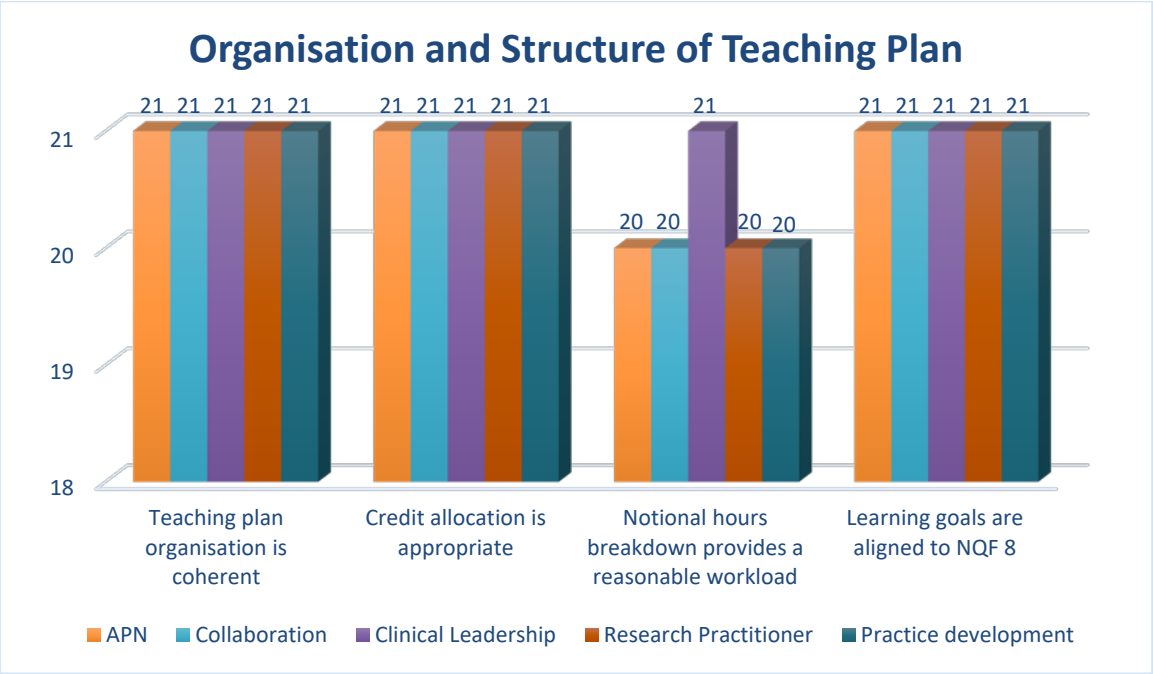

Figure 7.1 Results: Organisation and Structure of Teaching Plans

7.2.2. Teaching plan overview and information

The next element: Teaching plan overview and information consisted of four (4) criteria as illustrated in figure 7.2.

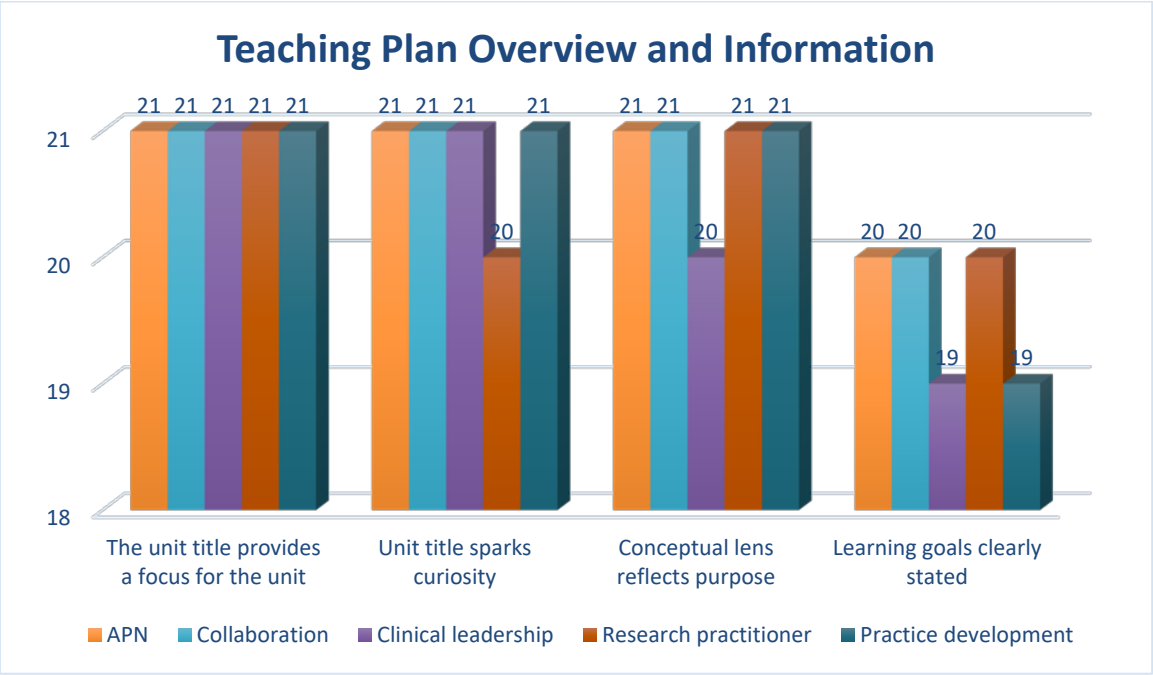

Figure 7.2 Results: Teaching Plan Overview and Information

The experts viewed this element overall as valid. However, two (2) experts questioned the clarity of the formulation of the learning goals. One (1) expert indicated that evidence of clinical judgement was not evident in the unit title and therefore not included in the conceptual lens.

7.2.3. Learning content

Figure 7.3 illustrates the outcome of the learning content which included three (3) criteria.

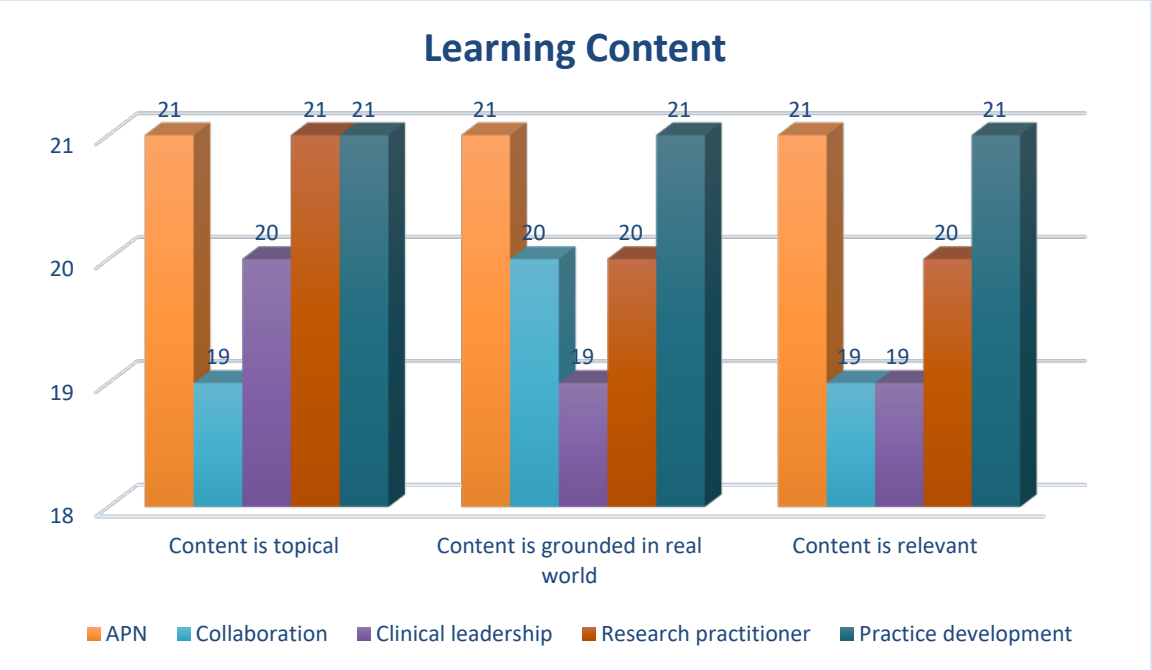

Figure 7.3 Results: Learning Content

The experts showed some concern regarding the appropriateness for this element, specifically related to the concept of collaboration. They questioned the establishment of a team which, as according to one expert, there was insufficient information in this regard. Another expert suggested using exemplars which better reflect the South African context. For the concept of clinical leadership, two experts indicated evidence of clinical competencies are lacking. They were also concerned about the lack of a strong link between the content and the concept leadership.

One expert commented on the content covered for the concept research practitioner, stating that the concept lacks research methodology as, she believed, was required by the SANC.

7.2.4. Learning activities

The learning activities, as illustrated in figure 7.4, consisted of four (4) criteria.

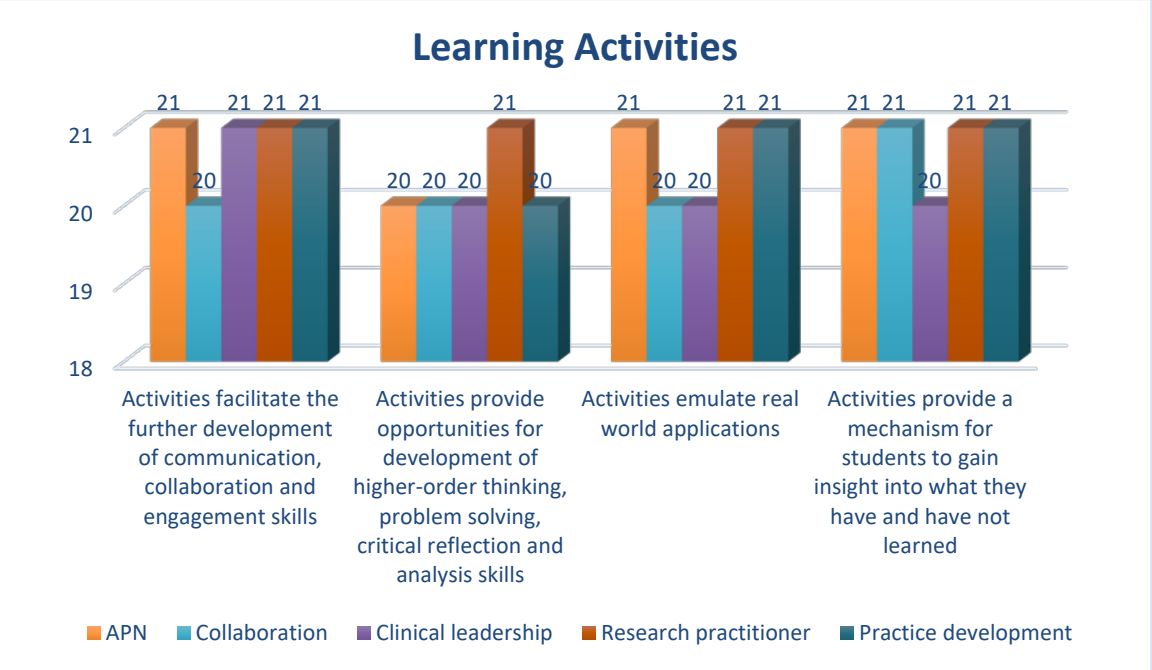

Figure 7.4 Results: Learning Activities

The experts did not believe that the indicator "appropriateness" was always achieved in the learning activities. A concern was noted by one expert that the discussion activities are dependent on the depth of the discussion to facilitate reflection and higher order thinking and can only be determined once implemented. Another expert questioned the appropriateness of using discussions around the APN role asking: "*is this conducive for determining life-long critical reflection?*". For the concept of clinical leadership, one expert felt the activities speak more to management rather than to leadership.

7.2.5. Learning evaluation / assessment

Figure 7.5 shows the results for this element and included three (3) criteria.

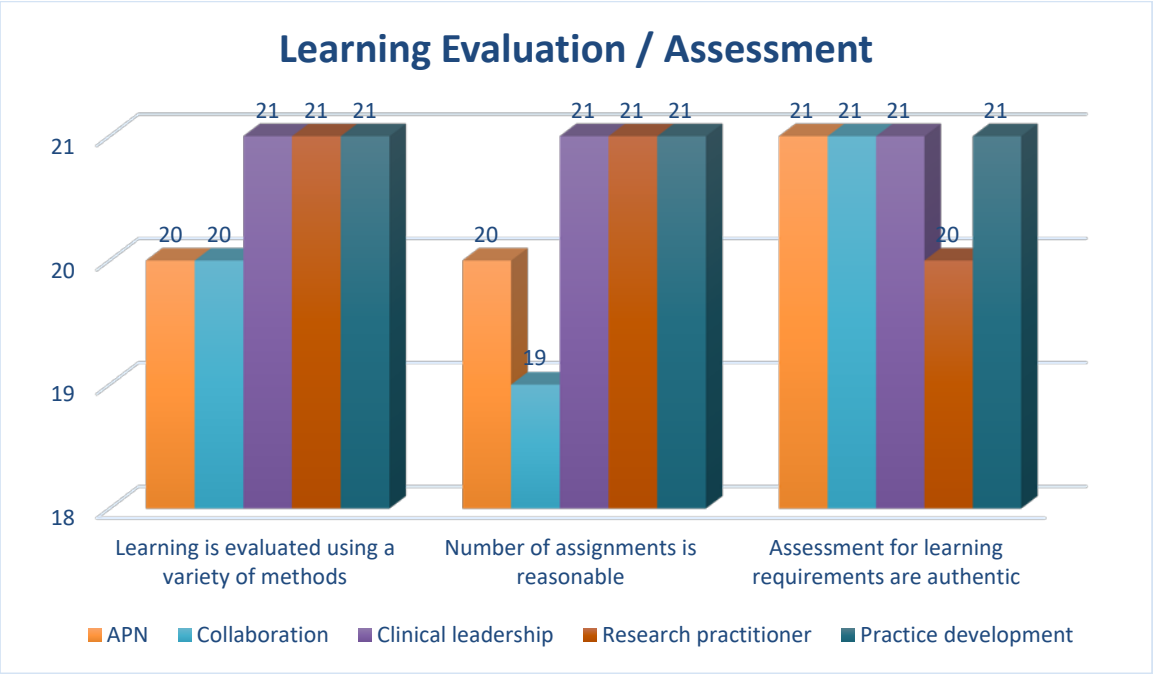

Figure 7.5 Results: Learning Evaluation / Assessment

Across the teaching plans of the concepts, experts commented on needing more information around the assessment and evaluation of the concept. It was not clear to them why there was only one assessment activity for each teaching plan. However, they believed that when the combination of teaching plans was viewed, the criteria was met. One expert indicated that more detail was required to enable validating the assessment and evaluation activities.

7.2.6. Teaching plan effect

The final element of the validation process was the teaching plan effect. There were two (2) criteria for measuring this aspect and the results are shown in figure 7.6.

The experts were overall satisfied with this element. One expert commented that the activities will stretch the student to push boundaries, especially the final evaluation activity. Another expert, however, commented that the term ‘maximum’ (relating to personal development), should be clarified or changed as the term is nebulous and may differ from student to student. This view was supported by another expert who stated that there is no guarantee that ‘maximum’ development will ever be achieved. Two experts commented on the ‘research practitioner’ concept indicating that the teaching plan would not prepare the student to conduct research.

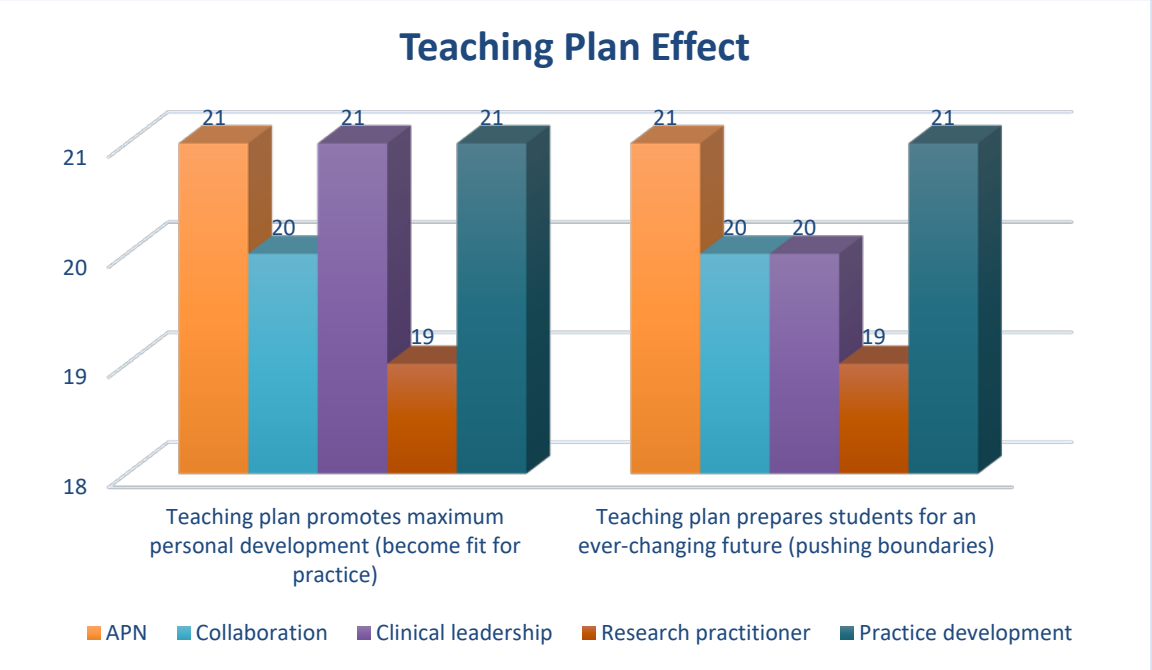

Figure 7.6 Results: Teaching Plan Effect

A teaching plan could reach a total score of four hundred and twenty (420) points. A total score of three hundred and eighty (380) points or 90% was considered indicative of a valid teaching plan. As indicated in figures 7.7 and 7.8, all the teaching plans scored above four hundred (400) points or 90% and were therefore deemed valid.

The total score was calculated:

7 experts x 3 indicators** x **20 criteria** = **total score

21 x 20 = 420

The teaching plan for Collaboration scored the lowest with 405 points (96%), mainly due to the indicator “appropriateness” not meeting the experts’ expectations. The teaching plan for Practice Development achieved the highest score of 416 (99%) with experts indicating it is a needed concept. However, they indicated that the formulation of the learning goals need attention.

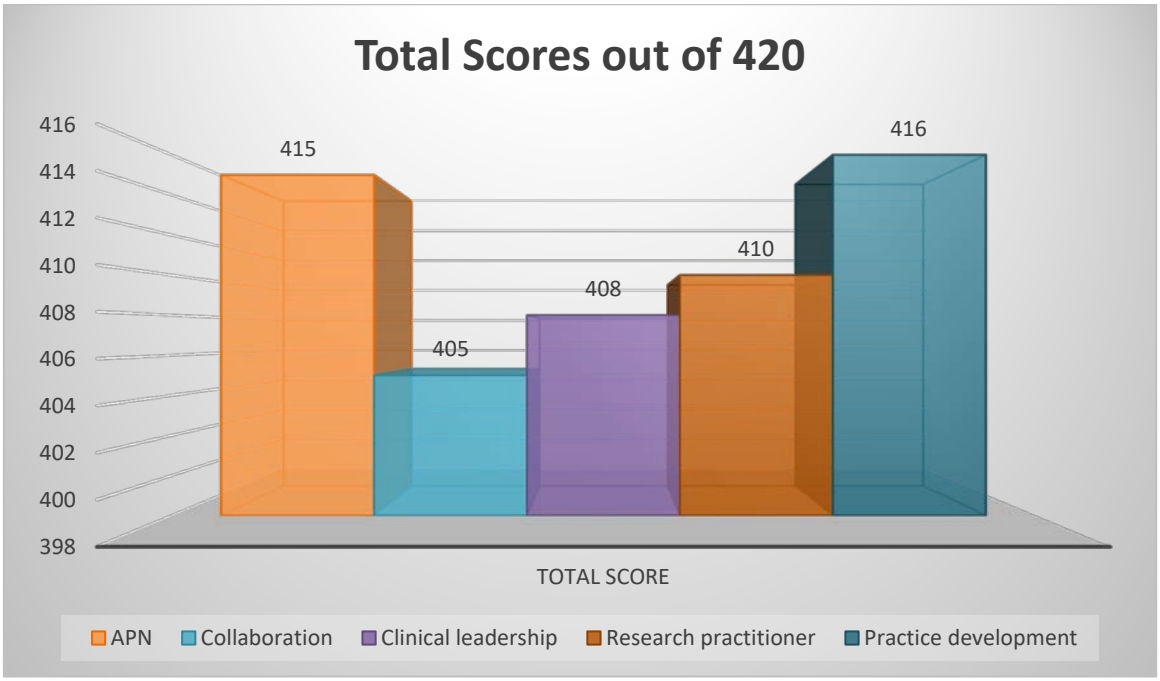

Figure 7.7 Total scores for teaching plans

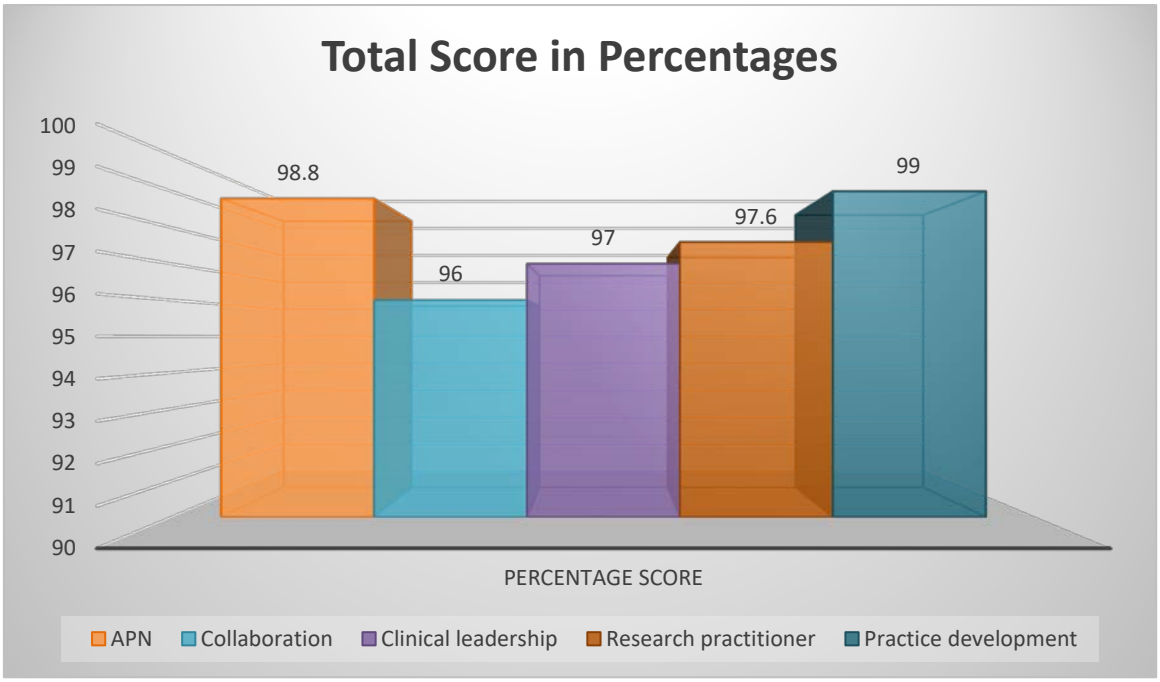

Figure 7.8 Total scores in percentages

7.3. Discussion

The three (3) indicators that were applied during the validation process of the teaching plans were: Acceptability, Appropriateness and Feasibility. The criteria for all aspects of the teaching plans were consistently judged as acceptable indicating consensus from experts on

this indicator. The indicator ‘feasibility’ was questioned around the breakdown of the notional hours, framing of learning goals and the assessment processes. The appropriateness indicator was mainly applied to the choice of learning activities and content by the experts.

Weiner *et al.* (2017) stated there will never be total agreement on indicators between experts when validating a document, because they review aspects from their personal perspective which might be influenced by their past experiences and / or current contexts. Reflecting on the validation process the researcher concurs with Weiner *et al.* (2017) that experts review from a personal perspective based on their own context and experience as illustrated in the discussion to follow.

The ‘Scholarship in Advanced Practice Nursing’ course will focus on the non-clinical competencies of an APN. The expert who made the comment that the course “*lack(s) clinical competencies*” may not have realized this and have seen the course from her perspective as a clinical teacher. The purpose of this course is, in reality, to prepare the student to understand the complexity of the role of an APN and develop general or personal competencies required for the APN role.

One expert mentioned that “*self-directed learning hours (were) excessive*”. There were similar concerns from the experts around the breakdown of the notional hours. These comments highlight the different approaches educational institutions apply when planning and structuring a course. The teaching plans presented to the experts were for a postgraduate diploma and, as indicated in Chapter 5, were designed to meet the exit level outcomes applicable to an NQF level 8 qualification. The research setting follows the rule of thumb to divide the notional hours into a third contact time and two thirds self-directed learning which includes time for assignments, self-study, and assessment. This principle has been applied to all the teaching plans.

The concept-based curriculum, which is the type of curriculum adopted for this programme, has not previously been used in South Africa and is unfamiliar to almost all nurse educators including the experts consulted. The comments that goals were not reflected as outcomes may be indicative of this fact. For many years outcome-based curricula have been used in this country and their use has become entrenched. Learning goals are broad generalised statements providing a roadmap of the planned teaching. Papadopoulou (2019) differentiates between learning goals and learning outcomes or objectives in that learning goals are achievable, long term goals but not necessarily measurable, whereas outcomes or objectives are describing a specific outcome that is measurable. Framing the planned learning as learning goals, allows for the student to derive their own learning objectives from the learning goals stated.

The last comment referring to a lack of research focus indicates the experts' stance from current practices where students complete a clinical masters by course work programme, which requires an understanding of research and the completion of a research study. This is, however, not the case with the new postgraduate diploma qualification being introduced on an NQF level 8 which only requires understanding and application of research. The name of the concept "Research Practitioner" could be misleading and lead to misinterpretation of the teaching plan focus. The comments from the experts highlighted this misconception and therefore, although the concept name was discussed and deliberated in Chapter 4, it should, on the basis of the expert reviewer's comments, be changed to "Evidence-based Practitioner".

Overall, the teaching plans achieved high scores which were therefore deemed to be valid. However, some comments and concerns of the experts have to be noted and considered before implementation to improve the overall quality of the teaching plans and to ensure a learning experience which will prepare the student to be practice-ready. The teaching plans were formatted into a facilitator guide (Appendix G) as a final product to be used when the course is implemented.

7.4. Conclusion

This chapter, validation of the teaching plans, concluded the DDR process. Although curriculum evaluation is not a once-off procedure, but an ongoing process, the course: Scholarship for Advanced Practice Nursing is ready to be implemented in a real-world setting.

The next chapter will provide an overview and summary of the research process as well as give recommendations for further research emanating from this project.

Chapter 8. Main findings, Limitations, Recommendations and Conclusion

8.1. Introduction

This final chapter presents the main findings emanating from the research; a description of the limitations related to the research process; and recommendations for further research in the areas of research, education, and nursing management.

8.2. Main findings

The research question was: 'How can an evidence-based curriculum be developed that will enhance critical thinking skills, promote social responsibility and drive students to embody life-long learning through a scholarship course in APN at a university in South Africa?'
The research question posed a real-world problem requiring a pragmatic approach to source a workable solution to address the need to prepare professional nurses to become fit for practice in adoption of the advanced practice nurse role.

In answering the research question, three (3) aspects unique to this research were identified and can be viewed as golden threads tying the phases of the research process:

1. Advanced Practice Nursing (APN) is a new category of nurse, in the South African context and was not previously recognised by the SANC;
2. Concept-based curriculum development was newly adopted by the research setting and is not widely used in postgraduate studies;
3. DDR is an unexplored methodology at the research setting.

Literature has demonstrated the complexity of the APN role and has highlighted the various challenges the nursing profession faces when implementing APN into healthcare settings. Translating the theory of advanced practice nursing into practice settings necessitates scholarship which guides the role enactment through sharing knowledge, evolving practice and reflection.

Preparing professional nurses to become scholars in APN, therefore requires an educational approach that facilitates thinking in a multi-dimensional way about practice. Scholarship provides a means to understand the complexities of providing holistic care while actively engaging the student in implementing evidence-based practice in healthcare settings. Concept-based curricula facilitate the development of key competencies such as conceptual thinking, critical reflection and reasoning which empower and enable the transfer of

knowledge into real world settings. It further encourages critical thinking which influences decision making and ultimately will impact the quality of care in practice settings. All of the aspects, required for successful implementation of APN, can be addressed through the application of concept-based learning.

The DDR methodology was useful in that it allowed for a natural progression of the curriculum development process. The objectives for this research fitted the phases of DDR and produced the following findings:

8.2.1. Objective 1

Phase 1 of the study addressed the first objective which was to explore the role of an APN as identified in international literature. The underlying thread from the literature indicated successful implementation requires a common understanding from all stakeholders around the role and function of APN. Through engaging with the literature, the researcher gained a better understanding about what advanced practice nursing is and what it is not. Reflecting on the processes followed by other countries, and the success rate in the uptake of APN in those countries, exposed possible pitfalls. This was useful for a country which has yet to implement APN as they are alerted to factors that should be considered and planned for. Role delineation, clear guidelines and common role understanding are key to successful implementation. Furthermore, management structures should be involved in supporting the APN to practice independently and utilise the APN to their full capacity.

The scoping review revealed key terms related to APN in three (3) categories: ‘roles’, ‘attributes’ and ‘related tasks’. This draws attention to the complexity of the APN role and further underscores the importance of preparing professional nurses to take on the role in its complexity which requires specialised education. As indicated in Chapter 3, the international community is placing an emphasis on preparing APN at a master’s degree or doctoral degree level. The SANC, however, has deviated slightly in dividing advanced practice nursing into two levels. The SANC stated that the first level of APN, the Nurse Specialist, should be academically prepared on an NQF level 8 (postgraduate diploma) and the second level, the Advanced Nurse Specialist, on an NQF level 9 (master’s degree). These aspects were considered by the researcher in preparation for the next phase of the study and the overall course development process.

8.2.2. Objective 2

Objective 2 aimed to explore the opinion of South African specialist nurses on the relative importance of aspects of APN. Both clinical and non-clinical nursing specialities were

represented in the results, however, the ranking of terms were inconsistent between, and within, specialities. This might suggest responses were recorded as they applied to the context of the respondent and not necessarily to what would be required from an APN. Another aspect that might have influenced the responses, was the understanding and connotations the respondents applied to the terms. If they automatically linked the term as it applies to their own context rather than the general understanding of the term it would render a different result.

Some respondents indicated it was difficult to complete the ROS as they felt items had equal importance and yet they had to place one above the other. This internal conflict suggests, and supports the researcher's assumption, that the ranking was done according to their personal preference and job requirements and not necessarily what is expected from the APN as a new category of nurse.

The researcher was therefore not convinced the results of the ROS reflected an accurate representation of the most important 'roles' of an APN. To meet the second objective the researcher included the results from both the scoping review and the ROS in a nominal group discussion to reach consensus on the important aspects of an APN. Interestingly the top ten (10) roles identified during the ROS were affirmed by the nominal group during the first round of voting.

The development of the subject matter was aligned with the second phase of the research process to determine the scope of the content to be included in the course. A nominal group method facilitated the process and participants were afforded time to unpack the meaning of each 'role' and 'attribute' and make connections between the various roles. The participants highlighted the general acceptance within the South African nursing community that our understanding of the roles and attributes of APN is synchronous with international frameworks. There was an underlying need amongst the various participants to be acknowledged, accepted and recognised for the contribution the APN can make to the healthcare industry. The participants further expressed a concern that if support from the management in practice settings is not obtained, role implementation and utilisation to full capacity will not be achieved within the South African context. This will defeat the purpose of introducing APN into the healthcare system, so needs to be sensitively managed. The outcome of the nominal group was the identification of five (5) concepts which encompass the most important roles and attributes that should be included in a course for APN.

8.2.3. Objective 3

Objective 3 (the design and development of teaching and learning and assessment strategies) was matched with the third phase of the research process, namely, to develop a prototype. The Scholarship for APN course aimed at preparing nurses for professional success which requires a focus on what students should be able to do with content rather than mere memorizing of content. The 'Backward Design' framework and 'Concept-based unit design' steps assisted with designing and structuring the course to enable synergistic thinking, transfer of knowledge, making meaning from experiences and application in practice settings. Drawing from educational theorists and educational frameworks a teaching plan for each of the identified concepts was developed showcasing the teaching and learning strategies and associated assessment activities.

8.2.4. Objective 4

Objective 4, which was to evaluate and validate the design of the course for use in the South African context was achieved in phase 4 and phase 5 respectively of the research process. The focus of this objective was to determine the quality of the teaching plans, prior to implementation, applying criteria that focus on utility rather than effectiveness.

Phase 4, the evaluation of the teaching plans, involved the internal stakeholders testing the curriculum structure for accuracy, completeness, and fitness-for-purpose. Consensus on the quality of the teaching plans was reached after careful consideration of each aspect of the teaching plans presented. The discussions initially concentrated on the technical aspects of the teaching plans. However, as the participants gained a better understanding of conceptual learning, the discussion progressed to interrogating the activities in relation to achieving the learning goals. It was clear, based on the observation of the participants' engagement with the teaching plans, that it will be important to implement in-service training on concept-based curriculum before implementation. The outcome of this evaluation process was consensus that the teaching plans met the quality criteria, and only the concept of 'Research Practitioner' involved deliberation around the appropriateness of the learning activities presented.

The validation of the course (phase 5) was achieved through an external expert review process. The experts were expected to validate the teaching plans against quality indicators: acceptability, appropriateness, and feasibility. Overall, the teaching plans achieved above 90% for each of the three (3) indicators which signified validity of the teaching plans. The experts showed an inclination to score the teaching plans from their personal experience,

and what might work in their own context. This was clear from their comments around the breakdown of notional hours, the focus on clinical competencies and the need to include research methodology. With the latter, the researcher acknowledges the possibility that the concept title: Research Practitioner, may have caused a problem. The concept title was therefore changed to 'Evidence-based Practitioner'.

Using the DDR phases facilitated the development of the final product - a facilitators guide for the course: Scholarship in Advanced Practice Nursing, which enabled the researcher to answer the research question and met the research objectives.

8.3. Limitations of the study

The DDR approach is pragmatic and follows the same principles as action research, and allows the researcher a degree of flexibility to act and respond to the findings to answer the research question. With the start of the research study, it was anticipated that the regulations guiding the implementation of the postgraduate diploma would be promulgated, however, not having regulations had some methodological implications. It has not, therefore, been possible to implement the curriculum and until this is done, the real impact of the curriculum on students learning cannot be measured.

The small sample size may be seen as a limitation, but as this study involved the development of a curriculum for a particular academic department, and involved all those within the department it was adequate for the purpose. A larger study may have resulted in different findings. Establishing transferability is difficult due to the small sample sizes used in the research, and transferability can only be determined once the course has been implemented.

The Rank Order Scale (ROS) with a 34.6% non-response rate supports some respondents' comments that it was not easy to complete. From a total of 52 responses captured on RedCap®, 18 responses were excluded due to either being not completed at all (n=11) or partially completed (7). The researcher can only infer, from the responses that it was not easy to complete the scale which could have influenced the respondents' willingness to complete the scale. Further to this, the researcher purposely did not include any definitions of the terms, as she felt this would influence or bias the respondents' responses. In hindsight, this might have contributed to the partially completed responses, but to what extent the non-responses would have influenced the results of the ROS is unclear.

The sample for the ROS consisted of professional nurses working in speciality areas and aimed to gain understanding of what they believed to be important aspects of APN.

However, other external stakeholders, such as the patients and managers in practice settings, were not included, and may have provided a different perspective on the expectations of the role of APN. Their perspectives might have emphasised aspects of the APN role other than what is currently reflected in the concepts presented in the final product.

The feedback from the participants indicated that not all participants were familiar with all the facets of the research process. Understanding the term 'advanced practice nursing' varied amongst the participants, especially as to how the SANC has defined the categories within APN which, in itself has caused confusion. This might have impacted the level of engagement from the participants.

Conceptual learning, the aim of a concept-based curriculum, requires a different approach to teaching and learning. Not all the participants were familiar with the processes involved with structuring a concept-based curriculum. This was seen in the comments that learning goals were not structured as learning outcomes as well as the stated need to see more summative assessments. It is not clear to what extent the unfamiliarity to concept-based learning impacted on their review of the teaching plans. Providing the participants in the evaluation and validation processes with contextual information / background information on concept-based curricula, conceptual learning, and the definitions of the concepts, might have shaped their views differently.

DDR, and specifically curriculum development, depend on consensus from role players. Literature around consensus methods, mainly describe the Delphi technique and Nominal groups with limited information around the use of stakeholder meetings and workshops, as research methods, to gain consensus. Another aspect, guidance around formative evaluation of curriculum products ***before*** implementation is not widely documented in the literature.

8.4. Recommendations

Recommendations will be presented as: recommendations for further research; recommendations for nursing education and recommendations for nursing practice.

8.4.1. Recommendations for research

The design and development method could be used in studies related to curriculum development due to its flexibility and the opportunity it allows for inclusion of multiple stakeholders. A suggestion would be to conduct a longitudinal study on the implementation of the curriculum to enhance the quality of such a curriculum.

The final product of this research study could not be implemented due to reasons mentioned in the limitations. Further research on the implementation of concept-based curriculum in postgraduate programmes is needed to explore the feasibility of using concept-based curricula at this level.

Establishing the impact of the course on healthcare outcomes through assessing the extent of transfer and application of knowledge in practice settings will demonstrate the effectiveness and responsiveness of the concept-based curriculum.

As the quality assurance of any curriculum is an ongoing process, establishing evaluation indicators and criteria for each aspect of the development and implementation process will be useful to ensure consistency of evaluations of the curriculum products and enhance the overall quality of the curriculum.

Further research to describe consensus methods within the educational domain will validate the use of educational strategies, such as the workshop, to gain consensus on product development.

8.4.2. Recommendations for nursing education

The implementation of concept-based curriculum requires a different educational approach to facilitate transfer of learning into real world contexts. Embarking on concept-based teaching can be daunting and confusing if not previously used. Facilities should therefore endeavour to prepare and support lecturers and students on the concept-based curriculum applications.

Currently the majority of professional nurses working in speciality areas, specifically in primary healthcare settings, are prepared at a diploma level. Although nurses have the work experience, they are not academically prepared at the appropriate level. Nursing education, therefore, should be cognisant of this when introducing programmes for the APN, encouraging the students to function to full capacity but not feel threatened. Further to this, the current workforce should also be upskilled academically through in-service training programmes to align the competencies.

8.4.3. Recommendations for nursing practice

Nursing managers should actively promote the role of APN and advocate implementation and integration of APN within their units. Nursing managers should, therefore, challenge the status quo, where nurses function as a ‘hand-maiden’ of the doctor, and create opportunities to employ APN to full capacity as independent practitioners to address the healthcare needs of society.

The SANC needs to synchronise the APN framework to the Acts and Regulations guiding advanced practice to address the current non-alignment between practice expectations and guidelines.

Practice settings should be modified to enable the APN to fulfil his/her role to full capacity. Interprofessional protocols should be created to allow the APN to use clinical judgement and reasoning when applying protocols to provide holistic patient-centred care.

Qualified APNs should, through systematic enquiry and scrutiny of nursing practices, enable and lead evidence-based practices to improve the quality of healthcare outcomes.

8.5. Conclusion

The research question for this study was: 'How can an evidence-based curriculum be developed that will enhance critical thinking skills, promote social responsibility and drive students to embody life-long learning through a scholarship course in APN at a university in South Africa?' The one aspect of the research question related to the best way of designing such a course. It was therefore necessary not only to examine how others had done this internationally, but also then to design a curriculum that fulfilled the purpose of developing a curriculum that prepared students to be critical thinkers who are socially responsive life-long learners and also to do so for the purposively selected university for which this curriculum was being developed. While doing this for a specific university it was necessary to include other stakeholders with a knowledge and interest in the research topic to ensure that the curriculum remained responsive to the larger nursing education community and did not fall into the trap of being too inwardly focused.

Through engaging with the steps of the methodology the researcher gained a deeper understanding of all aspects involved in curriculum development. Exploring and unpacking the theory behind concept-based curricula enabled a novel and much deeper approach to learning which is essential for teaching scholarship and this category of nurse. However, further research is needed to establish the acceptance of concept-based education by students and lecturers alike but also to test stability and transferability in other research settings.

The findings presented in this thesis provide evidence that using the DDR methodology was appropriate in relation to the construction of the course: Scholarship in Advanced Practice Nursing.

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Appendices

Appendix A: Ethical Clearance Certificates | Human Research Ethics Committee (Medical)
Certificate No: M160470

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R14/49 Ms L Crous

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M160470

NAME: (Principal Investigator)	Ms L Crous
DEPARTMENT:	School of Therapeutic Sciences Department of Nursing Education Medical School University
PROJECT TITLE:	Development of a concept-based postgraduate course: Scholarship in Advanced Practice Nursing at a university in South Africa
DATE CONSIDERED:	06/05/2016
DECISION:	Approved unconditionally
CONDITIONS:	Revised study title noted on 25/03/2020
SUPERVISOR:	Dr S Armstrong
APPROVED BY:	Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	05/08/2016

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on the 3rd Floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.
I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to submit details to the Committee. I **agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **May** and will therefore reports and re-certification will be due early in the month of **May** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature — Date: 25 March 2020

PLEASE QUOTE THE CLEARANCE CERTIFICATE NUMBER IN ALL ENQUIRIES

Appendix B: Participant information sheet

WITS UNIVERSITY

STUDY INFORMATION DOCUMENT

Study title: Development of a concept-based postgraduate course: Scholarship in Advanced Practice Nursing at a university in South Africa

Hello

I am reading towards a PhD degree in Nursing Education and aim to develop a course for the new nursing category: The Advanced Practice Nurse.
The scope of practice and the qualifications of a professional nurse are changing, and all nursing programmes have to be adapted to fulfil the criteria as set out by the South African Nursing Council (SANC). The Nursing Education Department of the university of the Witwatersrand is in the process of developing a concept-based postgraduate diploma to meet the criteria and standards of both the SANC and the Council of Higher Education (CHE). To meet the requirements for a PhD degree, I am facilitating the development process of the postgraduate diploma curriculum.
The research approach adopted for this study is design and development research and requires your participation, I will therefore not do research on you but with you. As part of a larger departmental project, your input will be valued, and you will contribute to the development of the course on Scholarship as part of the postgraduate diploma for specialist nurses. You are hereby invited to participate in this project.
There are various phases of design and development research where your participation might be required, and you might be approached to participate in more than one phase.

- Setting objectives involves a nominal group discussion to identify the roles of advanced practice nurses that is important in the South African context.
- Testing the course developed which involves participation in a workshop to determine if course alignment is achieved.
- Evaluate the course developed using set assessment criteria to ensure course objectives are met.

There will be no direct benefit to you for participating; however, your contribution will assist in the realisation of this project. Participation is voluntary, and you may withdraw at any time during the process, without providing a reason for the withdrawal. If you withdraw from the study, your contribution, with your permission will be used up to the point of your withdrawal, however, if you don't want your contribution to be captured it will be destroyed and disregarded.

The information provided will be kept confidential and will solely be used for the purpose of the study and any publications that may result from this study. Every effort will be made by myself to preserve your confidentiality and as far as possible ensure anonymity by assigning codes for participants on documents. However, as most of the methods for data collection involves active participation in group discussion, anonymity cannot be guaranteed, and confidentiality not enforced. Notes, interview transcriptions or any identifying participant information will be kept on computer in a password protected file.
All data collected in the course of the study will be securely retained for two (2) years, if a scientific publication arises from the study and six (6) years, if there is no publication. Thereafter it will be destroyed accordingly.

For further information or if you have any questions regarding your rights participating in this research study, you can contact myself or my research supervisor:

- Principle investigator: Lizelle Crous – 082 319 5642 or Lizelle.Crous@wits.ac.za
- Research supervisor: Dr Sue Armstrong – 011 4884061or Sue.Armstrong@wits.ac.za

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg ("Committee"). A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.
If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Thank you for reading this Study Information Sheet.

Date February 2017

Appendix C: Participant consent form

WITS UNIVERSITY Participant consent form page 1

Development of a concept-based postgraduate course: Scholarship in Advanced Practice Nursing at a university in South Africa

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details:

Lizelle Crous, Principal Investigator, telephone no. 0823195642, or by e-mail at Lizelle.Crous@wits.ac.za
Dr Sue Armstrong, Supervisor, on telephone no. 011 4884061, or by e-mail at Sue.Armstrong@wits.ac.za
Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.
Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____
Date: _____
Signature

WITS UNIVERSITY Participant consent form page 2

Development of a concept-based postgraduate course: Scholarship in Advanced Practice Nursing at a university in South Africa

I hereby consent to audio recording of the nominal group discussion[1], or workshop interaction[1], or expert group discussion[1].

I understand that:

- ☐ The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher and the research supervisor.
- ☐ The recording will be transcribed and any information that could identify me will be removed,
- ☐ The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research
- ☐ Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
- ☐ Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant: _____

Date: _____

Signature: _____

_____

Appendix D: Phase 4: Evaluation tool

Lesson plan:
Evaluating the Quality

Criteria	1 Does not meet my expectations	2 Needs improvement/ modification	3 Meets my expectations with minor changes / additions	4 Exceeds my expectations	Comment / Suggestions
Organisation and structure					
Lesson plan organisation is coherent.					
Lesson plan organisation is meaningful.					
Content is appropriate for my students.					
Content is topical.					
Content is aligned with outcomes.					
Learning goals					
Learning goals are clearly stated, (students can determine what they should know/do as a result of learning).					
Learning goals are aligned to the appropriate NQF level.					
Learning activities					
The lesson plan has an effective hook that engages the student from the start.					
The lesson plan activities provide opportunity for independent thinking, analysis and problem solving.					
Activities require students to synthesize, discuss, extend or reflect on what they have learned.					
Lesson plan provides a mechanism for students to gain insight into what they have and have not learned.					
Ease of use by others					
The lesson plan will be easy for another facilitator to use?					
Assessment					
Assessment for learning requirements are clear.					
Assessment for learning requirements are authentic (valid)					
Total (56)					

Appendix E: Phase 4 – Member confirmation tool

Member checking form: Lesson plan evaluation:

Scholarship in advanced practice nursing course.

Recommendations and suggestions from the workshop are highlighted in yellow.

Please complete the table below to indicate your level of agreement with the changes on the lesson plan documents.

Concept lesson plan	Agree	Disagree	Final comments
Advanced practice nursing			
Collaboration			
Clinical leadership			
Research practitioner			
Practice development			

Please return this form to Lizelle.crous@wits.ac.za

Appendix F: Phase 5 – Validation tool

Evaluation of Quality: Teaching plan –

Criteria	Acceptable Yes	Acceptable No	Appropriate Yes	Appropriate No	Feasible Yes	Feasible No	Please comment if answered *No*
Organisation and Structure of Teaching Plan							
Teaching plan organisation is coherent							
Credit allocation is appropriate							
Notional hours breakdown provides a reasonable workload							
Content and learning goals are aligned to NQF level 8							
Teaching Plan Overview and Information							
The unit title provides a focus for the unit							
The unit title sparks student curiosity (engage student from start)							
The conceptual lens reflects the purpose of the unit in providing a summary of the content that will be covered							
Learning goals are clearly stated.							
Learning Content							
Content is topical (reflects current developments)							
Content is grounded in the real world (bridges theory/practice gap)							
Content is relevant							
Learning Activities							
Activities facilitate the further development of communication, collaboration and engagement skills							
Activities provide opportunities for development of higher-order thinking, problem-solving, critical reflection and analysis skills							
Activities emulate real world applications Activities provide a mechanism for students to gain insight into what they have and have not learned							
Learning Evaluation / Assessment							
Learning is evaluated using a variety of methods							
Number of assignments is reasonable							
Assessment for learning requirements are authentic							
Teaching Plan Effect							
Teaching plan promotes maximum personal development (become fit for practice)							
Teaching plan prepares students for an ever-changing future (pushing boundaries)							

Adapted from: Zhao et al (2017) What aspects should be evaluated when evaluating graduate curriculum: Analysis based on student interview. Studies in Educational Evaluation. 54: 50-57

Bowen, Ryan S., (2017). Understanding by Design. Vanderbilt University Center for Teaching. Retrieved [30 October 2019] from https://cft.vanderbilt.edu/understanding-by-design/.

Appendix G: Final product – Facilitator guide

Concept Teaching Plan: Advanced Practice Nursing

School: School of Therapeutic Sciences	**Department:** Department of Nursing Education
Programme: Postgraduate Diploma – Nursing Specialist	**Course:** Scholarship for advanced practice nursing
NQF level: 8	**Course Credit value:** 30
Concept: Advanced practice nursing	**Concept credit value**: 2 credits (20 notional hours)
Duration: 1 week	**Contact time:** 4 hours **Assessment time:** 3 hours **Self-directed learning:** 13 hours

Title: Who are we? Moving towards specialisation

Conceptual lens: Role transitioning

The transition of roles from that of a professional nurse to a nurse specialist involves disengaging from their former role of a professional nurse and making psychological, behavioural and social changes in order to meet the expectations of nurses, nursing and society of the nurse specialist. This in turn requires an identity change which may be facilitated or retarded by the working environment and the acceptance of others of the nurse specialist's role. In the South African context Advanced Practice Nursing (APN) is divided in two levels the Nurse Specialist and the Advanced Nurse Specialist. This unit views the transitioning to the first level of advanced practice nursing, becoming a Nurse Specialist, in three areas:

Meaning making:
- The context in which the APN functions will allow the student to explore the expectations of practice on the Nurse Specialist.
- The characteristics and competencies required to meet the expectations of the practice environment to build trust in the profession.

Acquisition:
- Confidence to take on the role of Nurse Specialist to build trust in the APN role
- Reflection on own practice and development needs

Transfer:
- Challenges and opportunities to implement the Nurse Specialist role in own practice setting.

Learning goals:
Meaning making:
Explore conceptual models of advanced practice nursing from an international perspective to promote implementation of APN in South Africa
Critically evaluate own competencies against the role requirements of advanced practice nursing to facilitate career development

Acquisition:
Mastering theory, skills and behaviours such as reflection, collaboration, accessing resources and negotiating health systems to manage new situations.

Transfer: Navigate challenges and opportunities to create a personal development plan for transitioning into the Nurse Specialist role.				
Inter-related concepts: Clinical leadership Research practitioner Collaboration			Practice development Ethical and legal considerations in clinical practice	
Key competencies: Self-awareness and Self-knowledge of the profession Resourcefulness – access resources; seeking support and be supportive			Healthy interaction – collaborative work Confidence – perceived well-being; build trust	
Conceptual question: What do specialist nurses do, and who are they, that makes their practice advanced?				
Boyer Model and Content highlight	**Learning focus**	**Learning activity**	**Learning outcomes**	**Resources**
Discovery APN conceptual models that underpin specialist nursing development. APN conceptual models that underpin specialist nursing development	Explore the APN conceptual models that guide specialist nursing development	**Pre-reading:** Information on APN conceptual models. Summarise the roles, attributes and characteristics of APN of each conceptual model. **Facilitated contact:** Group activity: Compare summaries of the conceptual models of APN and Identify key terms from the comparison and write definitions for each.	*Relevance of definitions to Specialist nursing*	Information on the APN conceptual models Cards will be handed out – write the key term on one side and your group's definition on the back.
Integration Characteristics and competencies of APN/Nurse Specialist for the South African Context	Discuss the various role components of APN and identify the required characteristics and competencies to become a Nurse Specialist within the South African context.	You are entering a race **"transition into the specialist role"**: The goal is to become a practicing Nurse Specialist. • The first step is to become fit for the future race. Each group choose a topic and draw a picture to illustrate the essence of a nurse clinician (Nurse Specialist - highlight the roles, characteristics and competencies to be successful) • The second step is leaping the hurdles. Identify the possible challenges for implementing specialist nursing in SA.	*Originality in selection of roles, characteristics and competencies.* *Relevance of challenges and nominated collaborators.* *Reflection:* (*Capstone portfolio assignment)* Write a professional identity essay based on your reflection of the Conceptual question.	Flipchart paper, pens and sticky notes Topics: Newly qualified APN; APN in private practice; APN as educator; APN in the community

		For each challenge nominate a collaborative partner that can assist in resolving the challenge.		
Application Promote the implementation of Nurse Specialists in various clinical settings such as public, private and community settings	Discuss the benefits of implementing Nurse Specialists in a specific speciality area Reflect on existing perspectives of Nurse Specialists and the implication for implementation.	• The third step in the race is passing the baton. Write on a card your perspective of Nurse Specialists (individual) The facilitator draws cards (1 by 1) and as a group discuss the benefits or challenges around the perspective for implementation and how to enhance or change for implementation.	*Impact of the arguments* *Reflection:* Going back to the conceptual question – what difficulties do you anticipate you might encounter in transitioning into the role of a specialist nurse in your setting, how will you overcome that?	Cards White board
Teaching/Reflection Role transitioning – self-awareness and self-knowledge of profession	Identify own gaps and strengths to take on the role as Nurse Specialist	• The last step in the race is pushing the boundaries. Write and record a pledge to self and the profession around your role as a Nurse Specialist.	*Succinctness of pledge* *Reflection:* Reflect on the conceptual question and state how it influenced your pledge.	Create a FlipGrid video channel for upload of pledge.
Exemplars	Nurse Specialist (APN) in private sector Nurse Specialist (APN) in the community Experienced Nurse Specialist (APN) entering a new setting		Newly qualified Nurse Specialist (APN) Nurse educator as APN	
Assessment – Capstone portfolio	Develop a 5-year professional growth plan including the following elements: • Continuing education • Professional responsibility • Advocacy for the profession / role of APN • Role modelling			

Concept Teaching Plan: Collaboration

School: School of Therapeutic Sciences	**Department:** Department of Nursing Education
Programme: Postgraduate Diploma – Nursing Specialist	**Course:** Scholarship for advanced practice nursing
NQF level: 8	**Course Credit value:** 30
Concept: Collaboration	**Concept credit value**: 5 credits (50 notional hours)
Duration: 4 weeks	**Contact time:** 16 hours **Assessment time:** 3 hours **Self-directed learning:** 31 hours

Title: Better together: Make the connection

Conceptual lens: Organisational culture

The healthcare services are complex and fragmented; however, the nurse specialist is in a unique position to integrate services and overcome historical hierarchical factors in order to improve patient centred care and improve the quality of care. An inter-professional mind-set is required to realise the opportunities for creating collaboration within the healthcare services.

Learning goals:

Meaning making:

Explore the meaning of, and opportunities for, interprofessional collaboration within specialist healthcare services.

Demonstrate knowledge of Nurse Specialist role in implementing collaborative care involving the patient, caregiver, healthcare professionals and community.

Acquisition:

Acquire the skills of effective communication, adaptability, and empathy to enable a collaborative care plan to work.

Develop strategies for improving collaboration in the specialist healthcare setting.

Assess patients holistically (clinical, emotional and social needs) in order to mobilize resources of the healthcare team to create a patient-focused care plan.

Transfer:

Apply the determinants of learning, sharing and collaboration to multi-functional and interdisciplinary teams.

Inter-related concepts:	
Advanced practice nursing	Clinical reasoning
Clinical leadership	Diagnostic, special investigations and management
Research practitioner	Major situations and emergencies
Practice development	Supportive and palliative caring
Key competencies:	
Communication	Assertiveness
Autonomy	Problem solving
Accountability	Critical thinking
Responsibility	Teamwork

Conceptual question: Is too much collaboration a bad thing?				
Boyer Model Content Highlight	**Learning focus**	**Learning activity**	**Learning outcome**	**Resources**
Discovery (week 1) Characteristics of collaboration Attributes needed for successful collaboration	• Explore the Nurse Specialist role within collaboration • Identify the Nurse Specialist's level of autonomy and responsibility towards patient care	***Pre-learning:*** Write a story (paper copy) about a time when collaboration failed referring to the conceptual question and how your personal experiences influence your attitudes towards collaboration. ***In class discussion:*** Display your written story on the wall. Read displayed stories and use the sticky notes to identify key terms, attributes, characteristics around collaboration in each story and stick it next to the story. Group ideas and write definitions for each idea. Discuss the role of the Nurse Specialist in these stories and the level of accountability. How can we get a different outcome? ***Self-directed learning:*** Choose a scenario posted on the LMS – change the outcome of the scenario through collaboration	*Ability to identify characteristics of collaboration.* *Ability to identify the level of autonomy and responsibility of the APN*	Prestik; Sticky notes
Discovery (week 2) Formation of teams Types of teams Role of APN within teams Level of accountability and responsibility	• Facilitate interprofessional collaborations and team building within healthcare systems • Establish working partnerships to improve patient outcomes • Identify the relationship of working partnerships and teams • Exemplar: inter-professional teams	***Pre – learning:*** Read provided information on the Drexler Sibbert team performance model. ***In class activity:*** Workshop around the Drexler Sibbert team performance model. (Role play managing a pizza hut based on model) ***Self-directed learning:*** in the context of your speciality describe how you will go about establishing a team using the Drexler Sibbert team performance model.	*Ability to form a team through collaboration*	Reading material Workshop material

Integration (week 3) Principles of effective communication Factors impacting on team performance	• Demonstrate the use of communication principles within teams • Relate collaboration and communication to improve patient outcomes • Exemplar: breaking bad news	***Games:*** Listening and Ways of communicating – Blind drawing: In pairs – sit back to back; one person looks at the picture and describe it without using descriptive words while the other tries and draw the picture. ***Story telling***: Describe a time that someone did not take you seriously and what was the outcome ***Role play: Breaking bad news***: each group draws a card with "bad news" and break the news to members ***Debrief:*** principles of effective communication	*Demonstrate application of communication principles in activities*	Picture cards Cards with "bad news" scenarios
Application (week 4) Constructive and destructive behaviour and influence on collaboration. Decision making in teams. Responsibility of team members.	• Describe attitudes towards collaboration and the influence on collaboration. • Develop strategies to improve collaboration in specialist healthcare settings • Exemplar: M&M meetings	***Role play:*** *What if scenarios* – dealing with difficult situations (M &M meetings) ***Debriefing*** on what was constructive / destructive behaviour What factors could be changed to improve performance ***Reflect*** on conflict management Ethical decision making and Autonomy	*Able to identify own attitudes towards collaboration.* *Apply strategies to improve collaboration*	What if scenarios
Teaching/Reflection Your role in a team to reach the objective of the team.	Demonstrate understanding of Nurse Specialist role in collaborative care. Exemplar: Major casualty event	***Self-directed learning:*** Draw algorithms to indicate how collaboration can improve patient care in a major casualty event.	*Display understanding of own role in collaborative care*	
Exemplar	Major casualty / emergency event Breaking bad news		Inter-professional development M & M meetings	
Assessment – Capstone portfolio	Evaluate the team performance of a team with whom you work using the Drexler Sibbert model. Do a SWOT analysis and develop recommendations on how to improve the team performance. Write a report on the teams' success / or not and present to your unit manager.			

Concept Teaching Plan: Clinical Leadership

School: School of Therapeutic Sciences	**Department:** Department of Nursing Education
Programme: Postgraduate Diploma – Nursing Specialist	**Course:** Scholarship in advanced practice nursing
NQF level: 8	**Course Credit value:** 30
Concept: Clinical Leadership	**Concept credit value**: 7 credits (70 notional hours)
Duration: 7 weeks	**Contact time:** 28 hours **Assessment time:** 6 hours **Self-directed learning:** 36 hours

Title: Turns and transitions: Leading change

Conceptual Lens: Change management

In his/her role as clinical leader, the nurse specialist will not only need to prepare, equip and support their peers and staff members to adopt best practices to keep up with a rapidly changing health care environment, but , as a new category of nurse may him/herself encounter resistance and concerns regarding the role of a nurse specialist which needs to be overcome in order to successfully integrate the role into the healthcare team. In order to do this the nurse specialist, him/herself as well as staff members need to go through the change leadership steps as outlined by Gill (2003).

Learning goals:

Making meaning:
Understanding the 5 steps of the change leadership model by Gill (2003).
Appraise the internal and external forces' influence on leadership and affecting change within an ethical-legal framework.
Analyse dynamics and competencies for leading change for the individual practitioner and the organisation.

Acquisition:
Develop strategies to implement change through leadership
Apply principles of empowerment to communicate strategic plan
Develop strategies to deal with challenges
Employ motivation and empowerment strategies to gain cooperation of team members

Transfer:
Relate leadership competencies including conflict management, change management, relationship building and shared values to self.
Analyse clinical leadership and management of situational challenges in the context of healthcare delivery and improved patient outcomes.
Critically appraise own and others' clinical leadership strengths and areas for development.

Inter-related concepts:	
Advanced practice nursing	Patient outcomes evaluation
Collaboration	Diagnostic, special investigations and management
Research practitioner	Ethical and legal considerations in clinical practice
Practice development	Supportive and palliative caring
Key Competencies:	Emotional intelligence; motivation; empowerment; commitment

Communication; persuasion; delegation; creativity, change management Flexibility; vision alignment; role modelling	Accountability; authority; responsibility Decision making; conflict management

Conceptual Question: What is everyone thinking but no one is saying?

Boyer Model Content highlight	Learning focus	Learning activity	Learning outcome	Resources
Discovery (week 1) Characteristics of leadership. Decision making process in change management. Components of leadership and change – values, decision-making and ethical principles	• Explore the characteristics of leadership. • Understand the role of the decision-making process in managing change. • Analyse the components of leadership and change • Understanding the influence of ethical principles, values and culture on healthcare.	***Pre-learning 1:*** Reflect on the question: ***Just because an idea sounds good does it mean you should do it?*** and describe a time when a decision was made that had a significant influence on you. Relate your answer to the conceptual question. ***Pre-learning 2:*** Complete quiz on leadership vs management on the LMS. **Class Activity 1**: *The Alien at Dinner* Imagine yourself as aliens observing a dinner party. Point out unusual human social norms and explain it to the beings of your imaginary planet. ***Group discussion*** – Be open minded towards long-standing methods, pointing out just because something is accepted means it is the only way of doing things. Relate to practices in healthcare i.e. handover **Small group activity 2**: *Values clarification* Write 10 values that are important to you on sticky notes. In 30 sec discard the 3 least important In 20 sec discard a further 2 In 20 sec discard 2 more What are the top 3 values you have left and how does it relate to your profession? Write each of the top 3 values on balloons – you will have to protect your values from external threats (someone walking around with a pin). ***Discussion*** on the relationship of vision, values and culture on a personal, professional and organisational level.	*Develop a shared vision statement* and link values and culture to support the vision. *Relevance of ideas to leadership*	Pre-reading: articles on leadership and ethics Load quiz on LMS Create a discussion forum
Integration (week 2) • Principles of Change leadership • Problem identification	• Evaluate the process of change and appraise within the ethical-legal framework of the healthcare context.	***Pre-reading:*** Do a web search on Esidimeni and develop a timeline on what happened. (Post your timeline on the LMS) ***Class activity:*** in groups look at the information gathered on Esidimeni		

		• Identify causes for the tragedy • Identify key role players and state their leadership role • Critique the role players on value alignment; level of responsibility, accountability and authority ***Discuss*** *the above answering the question: If you say yes to this what must you say no to?*	*The impact of the arguments around what should we say no to.*	
Application (week 3 – 4) • Dynamics and competencies of change leadership • Lobby for change	• Analyse dynamics and competencies of leading change • Develop strategies to implement change through leadership	**Self-directed learning:** Draw a coat of arms that illustrates your capability to influence change: 1. Skills / competencies 2. Values for change 3. Recent achievements 4. Your motivation ***Reflect*** on why you want to implement change. Take a photo of your coat of arms and post to LMS. Comment on each other's coat of arms and state how it relates to you. **Self-directed learning:** Source information on how to develop a strategic plan. **Group class activity:** *The 4 P's* - The prospects of change – the unit wants to implement a new duty roster. Identify the following and complete the columns on the flipchart: **1. Project – list changes you want to implement** **2. Purpose – what benefits will the change bring** **3. Particulars – list details of aspects that needs to change** **4. People – identify how the people should change** Use the information and Map a strategic plan you would present to the hospital manager – link it to your shared vision statement, values and culture created in week 1	*identifications of competencies related to change.* *Clarity of strategic plan to implement.*	Flipchart paper and pens Week 3: 4 hours Develop strategy Week 4: 2 hours Present strategy
Week 4 – 5 • Principles of empowerment • Motivation and influence on change • Persuasion strategies	• Apply principles of empowerment to communicate strategic plan • Demonstrate ability to use motivation and persuasion to get cooperation from others.	***Pre-reading:*** Read up on empowerment and motivation ***Self-directed Activity: Identify types of people*** Identify someone you know that fits the description – describe how you will approach them and how will you communicate with them: **The Victim – You are out to get me** **The Rebel – Resist change** **The Critic – Opposes change** **The Advocate – Embrace change** **The Recruit – Early adopter** **The Bystander – Need a nudge (passive)**		

		Discuss motivation and empowerment strategies you will use to influence the person to change. ***Class activity 1: the terrible present*** In pairs choose an ideal birthday present for each other – don't reveal it. Write it on a piece of paper. Then look at the present suggestion given to you on a card by the facilitator. Try and convince your partner to accept the suggested present in 2 minutes. (art of persuasion): Group feedback – List all the terrible presents Who accepted the terrible presents – what convinced you to accept the present / how did you convince the person to accept the terrible present? ***Class activity 2:*** In groups write a scenario for a group role play about motivating and empowering staff to embrace the new duty roster for the unit. **Role play** each scenario **Debrief** each role play identifying principles applied.	*Creativity in art of persuasion* *Demonstrate ability to use motivation and persuasion to bring about change*	Week 4: 2 hours Write scenario Week 5: 4 hours Group role play
Week 6 – 7 Leadership and APN	• Explore leadership challenges in the healthcare setting. • Develop strategies to deal with challenges.	***Self-directed learning***: Interview 3 specialist nurses on their leadership challenges in practice settings or leadership challenges in general. ***Class activity: Fishbowl discussion*** **-** Choose 3 challenges identified from the interviews. First group sit around a table and discuss strategies to mediate the leadership challenges while the others observe. Only people around the table may participate in the discussion. Observers can tap a person sitting at the table to take their place at any time during the discussion. Objective to develop an action plan for implementation. ***Debrief:*** What could they relate to How did it make them feel being in either role of participant and/ or observer? The importance of sharing ideas, how to get your message across.	*Depth of discussion* Alternative to fishbowl – debate: Leadership in nursing – progress or stagnation. Develop an action plan to address leadership issues	Week 6 – interviews Week 7 – action plan presentations
Teaching/Reflection Leadership for change in APN	Reflect on what makes me a leader.	***Self-directed:*** Draw a concept map to illustrate the roles of a manager, a leader and change agent within the NHI. Look at your 5-year plan and comment on your purpose as a leader within APN – what changes will you make to your plan.	Post a revised 5-year development plan together with concept map.	
Exemplars	Esidimeni – (ethical dilemmas)		Introducing new scopes of practice	
Assessment – Capstone portfolio	Complete the leadership activity on the LMS indicate how important each aspect is for your speciality. (Jooste, 2017, p.69) Write a reflection on: To what extent do you align yourself with the authority, power, influence, accountability and responsibility outlined in your current job description and to the new job description of the Nurse Specialist.			

Concept Teaching Plan: Evidence-Based Practitioner

School: School of Therapeutic Sciences	**Department:** Department of Nursing Education
Programme: Postgraduate Diploma – Nursing Specialist	**Course:** Scholarship in advanced practice nursing
NQF level: 8	**Course Credit value:** 30
Concept: Evidence-Based Practitioner	**Concept credit value**: 10
Duration: 9 weeks	**Contact time:** 32 hours **Assessment time:** 10 hours **Self-directed learning:** 58 hours

Title: Navigating the evidence maze: Moving from evidence to action

Conceptual lens: Evidence based practice

Evidence-based practice is the cornerstone of an effective and efficient healthcare system and for clinical practice. The concept of Evidence-Based Practitioner under the conceptual lens of evidence-based practice aims to provide the student with fundamental skills to conduct and implement evidence-based practices in their practice setting.

Learning goals:

Making meaning:

Explore the similarities and differences between quality improvement, research utilization and evidence-based practice with respect to their usefulness in the nursing context.

Review the elements of the evidence-based enquiry cycle (assess, ask questions, acquire evidence, appraise evidence, apply evidence).

Understand the steps of Lasater's Clinical Judgement Rubric i.e. Effective noticing; Effective interpreting; Effective responding and Effective reflecting.

Acquisition:

Develop skills to access, assess and apply evidence in clinical nursing settings.

Transfer:

Integrate the concepts of evidence-based practice and clinical judgement into the specialist nursing context to improve the quality of patient care.

Inter-related concepts: Advanced practice nursing Collaboration Clinical leadership Practice development	Clinical reasoning Nurse prescribing Patient outcomes evaluation Primary, secondary and tertiary prevention Diagnostic, special investigations and management
Key competencies: Evidence-based decision making Clinical judgement	Critical appraisal Quality improvement

Conceptual question: Does curiosity kill the cat?

Boyer Model **Content highlight**	**Learning focus**	**Learning activity**	**Learning outcome**	**Resources**
Discovery (week 1) • Types of research that generates evidence • Evidence and nursing enquiry	• Explore the scope of evidence from discovery to application • Assess researchable problems	***Pre-learning:*** Read material provided on EBP, Clinical judgement and Quality improvement. ***Class activity 1:*** *Looking through the magnifying glass* - Objective to identify evidenced-based topics involving nursing action Form small groups (3-4) Draw your clinical area – use different markers to identify: • Problem areas • What concerns you in the clinical area? • What excites you in the clinical area? • Nursing actions with bad results • Harmless interventions with bad outcomes Discuss in group and choose the most important issue and relate your issue to the conceptual question. Write the groups issue on the wall. ***Class activity 2: Carousel exercise:*** Quality improvement; Research utilisation; Evidence-based practice and Clinical judgement. *Document:* Definition; Characteristics; Application during discussion Share information with other groups. Each group to walk around the room and identify the best approach to solve problems identified earlier. ***Discussion -*** compare and contrast research approaches to each problem and identify the best approach.	*Ability to identify issues in nursing.* Compare and contrast exercise will be for self -study if not completed in class	Provide reading material / links on topics
Discovery (week 2) • Data vs Evidence • Steps in a systematic approach	• Differentiate between data and evidence • Develop skills to conduct an evidence-based study	***Self-directed learning: Journal club:*** Access an article on a nursing skill that has changed as a result of Evidence-based research (practice guidelines). *Write a review:* Discuss the attributes of evidence Identify the levels of evidence and the contribution to quality Assess the evidence in your article Reflect on the systematic approach followed in the article in relation to clinical judgement.	*writing a review*	Clarify the steps for conducting an EBP study.
Integration (week 3) • PICO question • Searching the literature	• Unpack the PICO question and formulate a speciality related question.	***Class activity:*** *Asking questions* On the walls is topics in nursing Divide into smaller groups		Topics for each speciality

	• Acquire information • Exemplar: literature review	Each group start at a topic – and write a research problem for the topic. Groups move clockwise to next topic – Identify the P for the PICO question Groups move again – write the I for the PICO question Groups move again – write the C for the question Groups move again – write the O for the PICO question Groups move again – critique the PICO formulated for the topic. **Self-directed learning:** *Conducting a literature review:* Use your PICO question and conduct a literature search Access data bases Search and identify publications	*ability to formulate a PICO question*	Prisma diagram template Additional readings on types of literature reviews This activity will start in the class – ensure library access and tutorial to access databases.
Week 4 • Appraisal of literature • Summarising evidence	• Appraise the quality of literature • Summarise the main findings in the literature	***Self-directed learning:*** Populate the data extraction tool Complete the data extraction tool from list of articles Interpret findings in relation to the clinical judgement model and make recommendations		Reference articles on literature reviews
Application (week 5 – 6) Quality improvement meets Evidence-based practice	• Apply findings to own clinical setting • Develop an implementation plan for own context	***Class activity:*** Develop a plan to implement the recommendations in your own context. Present in class how you will get the cooperation from your team to implement your recommendations Class activity 2: Discussion on – • good intentions with bad results • Harmless interventions with bad outcomes	*appropriateness of recommendations.*	Week 5 develop strategic plan Week 6 present strategies for implementation
Teaching/Reflection Challenges with implementation	• Overcome barriers	***Self-directed learning:*** Evaluate the EDL guidelines in terms of good evidence-based practice Reflect on the conceptual question and relate it to challenges vs change and your role as APN in the process. Look at your 5-year plan and indicate what changes with justifications you will make as a result of your new understanding of evidenced-based practice		Re-submit update 5-year plan on LMS EDL guidelines
Exemplar:	EDL guidelines Care Bundles		Literature review	
Assessment **Week 7 – 9** **Capstone portfolio**	Assess one of the following: EDL guidelines; Care Bundles; POPI Act in relation to evidence-based practice and clinical judgement Write recommendations for implementation within your speciality area			

Concept Teaching plan: Practice Development

School: School of Therapeutic Sciences	**Department:** Department of Nursing Education
Programme: Postgraduate Diploma – Nursing Specialist	**Course:** Scholarship in advanced practice nursing
NQF level: 8	**Course Credit value:** 30
Concept: Practice Development	**Concept credit value**: 6 Credits (60 notional hours)
Duration: 4 weeks **Capstone project:** 3 weeks (Final evaluation)	**Contact time:** 20 hours **Assessment time:** 5 hours **Self-directed learning:** 25 hours **Reflection:** 10 hours

Title: Gaining momentum

Conceptual Lens: Role promotion

The promotion of the Nurse Specialist within advanced practice nursing involves development of the person, the profession and the practice environment. Nurses play a key function within the healthcare system and due to their influence on the healthcare system promotion of their role will enable the delivery of quality healthcare. This unit views the promotion of the Nurse Specialist role within four strands namely: the regulatory framework; systems thinking; quality in healthcare and continuous education which embrace the importance of the person, the profession and the practice of nursing.

Learning goals:

Making meaning:

Analyse the ethical-legal framework in relation to APN to promote the role of Nurse Specialist within the healthcare context.
Using systems thinking principles develop an opinion on how APN and the Nurse Specialist fits into the healthcare system
Evaluate factors impacting the delivery of quality care and the role of APN in quality assurance
Discuss the impact of continuing education on promoting the Nurse Specialist role within the healthcare context.

Acquisition:

Formulate a value-system within the ethical-legal framework for shared governance.
Recognise the importance of quality assurance to improve patient-centred care delivery
Adopt lifelong learning skills to influence the practice environment and profession

Transfer:

Develop strategies to integrate continuing education to promote and advocate the role in the healthcare context
Use knowledge of systems thinking and the ethical-legal framework to influence the perception of society about the role of the Nurse Specialist

Inter-related concepts: Advanced practice nursing Collaboration Clinical leadership	Research practitioner Patient outcomes evaluation Ethical and legal considerations in clinical practice Supportive and palliative caring

Key Competencies Empowerment Engagement Person-centred care	 Quality improvement Decision making Critical thinking

Conceptual Question: Who decides when to question the status quo?

Boyer Model **Content highlight**	**Learning focus**	**Learning activity**	**Learning outcome**	**Resources**
Week 1: Exemplar – regulatory framework				
Pre Reading Factors impacting implementation of APN. APN vs HCP	• Differentiate between APN and other HCPs	***Self-directed learning:*** Draw a table to indicate the differences and similarities between APN and HCP Relate the information to the conceptual question.	*completeness of table.*	Articles related to governance Read about governance
Discovery • Regulations, Acts and policies pertaining to advance nursing practice • Ethical and legal frameworks applicable to nursing and APN	• Analyse regulations and formulate parameters related to APN practice	***Class activity:*** *Carousel exercise:* Divide into groups – each review a specific regulation, policy or Act In a carousel exercise share information In groups develop a concept map to illustrate the parameters for practice of an APN in the South African context.	*Applicability of the scope of practice parameters within the ethical-legal framework of SA*	Regulations, policies and Acts guiding APN practice
Integration Governance within the frameworks and regulations	Develop strategies to promote implementation of the Nurse Specialist role in practice settings	***Class activity: Think-pair-Share activity:*** Think about how you would go about introducing a Nurse Specialist in your unit – consider all elements under governance (HR, Finance, Function) who will the Nurse Specialist collaborate with? Share your ideas with your partner and collate your ideas and then Share with the bigger group.	*Relevance of ideas*	
Application Regulatory frameworks impact on job and work requirements	Develop strategies to establish the Nurse Specialist role in practice settings	***Class activity:*** In groups create a job-description/specifications for a Nurse Specialist for your unit.	*Completeness of the job description to be implemented.*	Job description criteria
Teaching/Reflection Expectations of APN	• Reflect on realistic expectations of implementing APN	***Self-directed learning:*** Write a reflection on why you qualify to apply for the position in the job description	*Depth of reflection*	Create online assignment
Week 2: Exemplar – health systems				
Discovery Components and principles of systems thinking	• Gain understanding into health systems and factors impacting on systems. • Identify components and principles related to APN	***Pre-Learning:*** Watch video of Russ Atkoff on systems thinking. Identify the principles of systems thinking and relate to APN	*Originality in applying principles to APN*	Video of Russ Atkoff 1 hour

		Create flashcards: on the front have the principle of systems thinking and on the back the application to your practice setting/APN.		
Integration • Structure and function of healthcare systems	• Identify and describe each structure in the healthcare system and discuss how the APN fits into this system	***Class activity:*** Interactive workshop on health systems with discussion on how APN fits into health systems followed by Health systems game answering questions on key elements of a health system	*Depth in discussion health systems*	Workshop material Articles on systems and health systems
Application Contributions of the public and private sector and the NHI	• Debate the contributions APN/NS makes to private, public and NHI systems	***Self-directed learning: Write an opinion paper on:*** The governance role of APN/NS within the Private, Public and NHI	*Originality in synthesis of paper*	Guidelines: writing an opinion paper to be provided
Teaching/Reflection The role of APN within the healthcare system	• Reflect on issues impacting on implementing APN within the healthcare system	***Self-directed learning:*** Draw an organogram showing where you as an APN fit into your organisation with justifications highlighting your sphere of influence Revisit the conceptual question and state the changes if any.	*Sphere of influence: Area in which an individual has power to affect events and developments – clear boundaries.*	
Week 3: Exemplar – Quality assurance				
Discovery Relationship between quality assurance, quality control and quality auditing	• Analyse the components of quality assurance, quality control and quality auditing	***Carousel exercise*** – Each group to familiarise themselves with one of these topics and share with others.	*Depth of discussing topics*	Pre reading documents on quality
Integration Factors impacting on delivering quality care	• Identify enablers and barriers to implement quality care and what role can the APN play	***Class activity: Story telling:*** In your group tell a story of a time when you felt a patient / family member / yourself did not receive quality care. Choose one story for the group to present: Identify what factors impacted on the care delivery What could be the possible reasons? What could be done differently? How will you change the story? **Self-directed learning –** analyse provided report related to patient rights Identify 5 problem areas and state the factors impacting on the delivery of quality care Develop a quality improvement plan using the PDSA model to resolve these issues	*breadth of identifying factors impacting on quality* *Completeness of PDSA plan*	Report documents related to patient rights.

Application The APN role in quality management processes	• Relate to APN role within the quality management process	***From the Group activity*** – discuss the APN role and how does it differ from other nursing roles and other HCP to solve these problems	*Depth of discussion*	
Teaching/Reflection Your role as APN in quality assurance	• Identify strengths and weaknesses on taking up quality assurance	***Reflection:*** Do a SWOT analysis of self and integrate information in the 5-year growth plan – highlighting changes and relate to the conceptual question.		
Week 4: Exemplar – Lifelong learning				
Discovery Aspects of lifelong learning and practice development	• Define lifelong learning and practice environment • Reflect on coaching and mentoring • Define empowerment as a tool for practice development	***Pre-Learning:*** Define lifelong learning Create a quiz on the elements of lifelong learning and practice development ***In class:*** Play quizzes created on Kahoot		
Integration The relationship between lifelong learning and practice development	• Discuss the relationship of lifelong learning and practice development	***Small group discussion on practice development and lifelong learning*** – each group will pick a card with a learning opportunity. Define the learning opportunity and explain what the expected outcome would be on practice development. Present findings to class	*ability to relate teaching opportunities with practice development*	Cards with learning opportunity ideas and blank cards for them to complete
Application The role of APN in practice development	Identify key characteristics and competencies to stimulate lifelong learning in the workplace.	***Choose an example of a learning opportunity in the workplace*** – analyse the process and explain how you as an APN could have improved on it. Develop strategies to integrate lifelong learning in your practice setting. Present plan to class	*Peer assessment on appropriateness of plan*	
Teaching/Reflection Reflection on own role in practice development	Identify opportunities to enact your role in practice	Write a reflection on what development needs you have to enable you to fulfil this aspect of your APN role.		
Assessment – Capstone portfolio	Develop a continuing education plan for your workplace • Indicate all educational opportunities • Topics for inclusion • Type of learning – formal or informal • Your role in this process • Expected impact on practice development.			

Capstone portfolio: - Final assessment (3 weeks)

Create a role enactment video to demonstrate what you have learned from the Scholarship in APN course.

Postgraduate Diploma

Scholarship in APN:

This course covers the advancement of the teaching, research and practice of nursing. It consists of four components: (1) Clinical Leadership which refers to the ability to influence practice across 4 domains namely clinical practice, professional organizations, healthcare systems and health policymaking arenas; (2) Research Practitioner which uses research for the formal, diligent and systematic gathering of information for the advancement of knowledge and can be divided into basic research aimed at increasing scientific knowledge and applied research aimed at utilizing research to solve problems or develop new processes or techniques; (3) Collaboration which is a dynamic interpersonal process that requires a total awareness and recognition of roles and responsibilities of and meaningful engagement with members of the interprofessional team, patient, family and caregiver; and (4) Practice Development which is a continuous process of improvement and methods used to address and advance healthcare practices and the profession of nursing.

Objectives	Assessment criteria
1. Shared leadership and decision-making by effective communication in multi-disciplinary teams within a framework of advocating and practicing the human rights of patients. 2. Applies knowledge and principles of the research process applicable to specialist clinical practice. 3. Creates, applies and integrates new knowledge through evidence in nursing education. 4. Identifies and formulates research questions pertaining to nursing education and practice. 5. Evaluates best available evidence and disseminates it to a professional audience 6. Links scholarship within the professional, ethical-legal framework. 7. Designs and develops new curricula at macro, meso and micro levels. 8. Discerns the relevance of a curriculum within a specific context with regard to educational paradigm, outcomes and assessment methods.	1. Legibility in shared leadership and decision-making by effective communication in multi-disciplinary teams within a framework of advocating and practicing the human rights of patients. 2. Depth in the application of knowledge and principles of the research process applicable to specialist clinical practice. 3. Originality in creating, applying and integrating new knowledge through evidence in nursing education. 4. Currency in identifying and formulating research questions pertaining to nursing education and practice. 5. Relevance in evaluating best available evidence and disseminates it to a professional audience 6. Breadth in linking scholarship within the professional, ethical-legal framework. 7. Originality in designing and developing new curricula at micro, meso and macro levels. 8. Impact in discerning the relevance of a curriculum within a specific context with regard to educational paradigm, outcomes and assessment methods.

Scientific foundations for specialist practice:

This course introduces the nurse to knowledge of sciences (epidemiology, pharmacology, toxicology and pathophysiology) applicable to the speciality and engages them in that specific discipline at an advanced level. The course consists of an interrogation of multiple sources of knowledge to identify and analyse complex and abstract health related problems and make appropriate decisions for the management of the patient, family and community within a specific discipline. There are four components in this course: (1) Advanced Clinical Assessment which builds of the professional nurses' existing knowledge, understanding and skills in order to take them to take them to an advanced level within the nurses' specific area of practice; (2) Clinical Reasoning which is the process by which nurses (and other clinicians) use the cues and other data gathered during clinical assessment to process the information through a non-linear series/spiral of linked and ongoing clinical encounters; (3) Nurse Prescribing which included the implementation of a decided plan of evidence-based action specific to each patient, taking into account his/her holistic needs and focused upon achievable outcomes and includes the use of advanced clinical skills required by the plan to achieve the required outcomes; and (4) Patient Outcomes Evaluation which refers to various methods of assessing health, illness and benefits of health care interventions and which may include clinical observation, interview schedules or technological aids.

Objectives	Assessment criteria
1 Analyse complex and abstract health related problems. 2. Make appropriate decisions for the management of the client, patient, family and community within a specific field, discipline or practice. 3. Apply knowledge of epidemiology, pharmacology, toxicology and pathophysiology to the scientific nursing of the patient, family and community. 4. Produce clinical judgement and reasoning in the assessment and management of the client, patient, family and community. 5. Plan and execute clinical management which is evidence-based and specific to each patient. 6. Distinguishes various methods of assessing health, illness and benefits of health care interventions which considers the effectiveness of past care or the need for future care and which may include clinical observation, interview schedules or technological aids.	1.Depth in the analysis of complex and abstract health related problems. 2. Relevance in the decisions for the management of the client, patient, family and community within a specific field, discipline or practice. 3. Accuracy in the application of knowledge of epidemiology, pharmacology, toxicology and pathophysiology to the scientific nursing of the patient, family and community. 4. Breadth and depth in the production clinical judgement and reasoning in the assessment and management of the client, patient, family and community. 5. Originality in the plan and execution of clinical management which is evidence-based and specific to each patient. 6. Legibility in distinguishing various methods of assessing health, illness and benefits of health care interventions which considers the effectiveness of past care or the need for future care and which may include clinical observation, interview schedules or technological aids.

Elective:	
This clinical speciality elective course will prepare the specialist nurse to take full responsibility for their clinical practice, decision making and use of resources as well as for the team under their supervision in adult health nursing using evidence-based practice to influence and impact this specialist level. It covers seven concepts: (1) Epidemiology; (2) Primary, Secondary and Tertiary Prevention; (3) Advanced Pathophysiology; (4) Diagnostic, Special Investigations and Management; (5) Major Situations and Emergencies; (6) Ethical and Legal Considerations in Clinical Practice; and (7) Supportive and Palliative Caring. Each of these are addressed within the Adult Health Nursing context.	
Objective	Assessment criteria
1. Practice within the ethical-legal parameters of the nursing profession and resolve professional-ethical dilemmas by using decision-making and moral reasoning models in adult health nursing. 2. Applies knowledge of epidemiology, prevention, advanced pathophysiology, diagnostic special investigations, and management, major situations and emergencies, and, supportive and palliative caring in adult health nursing. 3 Renders and coordinates comprehensive adult -centred nursing care to patients in a variety of adult health care settings, to promote health outcomes. 4. Synthesises and utilizes principles of evidence- based care to ensure quality in adult health nursing. 5. Manage adult health nursing services by implementing effective medico-legal norms, practices and standards within an inter-professional team.	1. Currency in practicing within the ethical-legal parameters of the nursing profession and resolve professional-ethical dilemmas by using decision-making and moral reasoning models in adult health nursing. 2. Accuracy in applying knowledge of epidemiology, prevention, advanced pathophysiology, diagnostic special investigations, and management, major situations and emergencies, and, supportive and palliative caring in adult health nursing. 3. Impact in rendering and coordinating comprehensive adult -centred nursing care to patients in a variety of health care settings, to promote health outcomes. 4. Breadth in synthesising and utilizing principles of evidence- based care to ensure quality in adult health nursing. 5. Impact in managing adult health nursing services by implementing effective medico-legal norms, practices and standards within an inter-professional team.