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**WHAT IS THE POTENTIAL OF DISTANCE EDUCATION  
FOR LEARNING AND PRACTICE DEVELOPMENT  
IN CRITICAL CARE NURSING  
IN THE SOUTH ISLAND OF NEW ZEALAND?**

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Jane Hardcastle

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**WHAT IS THE POTENTIAL OF DISTANCE EDUCATION FOR LEARNING AND PRACTICE DEVELOPMENT IN  
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**ABSTRACT**

This thesis explores the potential of distance approaches to teaching and learning in post registration nursing education within the context of critical care nursing practice. The thesis specifically considers the appropriateness of distance education within the population of critical care nurses in the South Island of New Zealand. The geographical distribution of critical care services and subsequent population distribution of practising critical care nurses within the South Island has resulted in a demand for post registration education from relatively small yet distinct groups of nurses spanning a substantial land area (150,461 Km<sup>2</sup>). National shortages of experienced and qualified critical care nurses, and consensus regarding the necessity for post registration education for specialist practice have been recognised throughout the Western World (Ball 1992, Charlton, Machin and Clough 2000, Cutler 2000, Johnston 2002). Yet nurses in the South Island of New Zealand have limited provision or access to critical care education programmes (Hardcastle 2003). The thesis therefore presents a pertinent and timely exploration into the potential of distance approaches to educational provision for an area of specialist practice that is currently unable to consistently meet health care demands.

The thesis uses descriptive and interpretive research (previously conducted by the author), and relevant literature in order to provide a comprehensive exploration of the study context and consider the research question. The thesis aims to enhance understanding of the specific population in terms of educational provision and demand, and the meaning of 'effective' education for critical care nursing practice. Subsequent examination of the potential of distance education within this context will more clearly indicate whether distance approaches could be compatible with concepts of effective education. The outcome of which will be useful in order to determine educational strategies that may positively influence the future of education for critical care nursing practice within the South Island of New Zealand.

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## INTRODUCTION AND BACKGROUND

Health-care providers require a dynamic workforce that possesses the capability, skill, innovation and compliance to address the expanding continuum of health care needs and respond with appropriate quality service. One point on the acute health care continuum is collectively termed 'Critical Care' and may be extended to various spheres of practice including; intensive care, coronary care, high dependency, operating theatres, recovery units, and emergency care (Chaboyer *et al* 1997, Scholes & Chellel 1999, Charlton, Machin & Clough 2000). Although the term 'critical care' may refer to the act of caring for a person in a critical condition, regardless of their locality within the hospital, nurses who regularly care for persons who are critically ill, invariably do so in designated critical care areas. In recognition of the unique role of the 'critical care nurse', the *Declaration of Madrid on the Preparation of Critical Care Nurses* was published in 1993 in order to provide guidelines for "governmental, professional and educational bodies governing the practice of nursing" (p.24). The declaration defines the role of the critical care nurse as:

"..essential to the multidisciplinary team needed to provide care to critically ill patients. The critical care nurse, which [sic] enhances delivery of a holistic, patient-centred approach in a high tech environment, brings to this team a unique combination of knowledge and caring. In order to fulfil their role, nurses require appropriate specialised knowledge and skills not typically included in the basic nursing programs of most countries".

(Declaration of Madrid on the Preparation of Critical Care Nurses 1993, p.24)

This belief is reflected in widespread consensus regarding the need for post registration nursing education programmes that specifically address the concerns of specialist practice within critical care nursing (Arthur *et al* 1983, Oermann 1991, Ball 1992, Hendricks-Thomas, Crosby & Mooney 1995, NZNO 1996, Chaboyer *et al* 1997, Strachan, Armstrong & Sibbald 2000, Jeffrey 2000, Cutler 2000, Gibson & Douglas 2000). In addition to orientation and in service education programmes that address the norms and safety issues of local nursing practice, nurses practising in critical care environments frequently undertake formal post registration qualification(s) in critical care nursing.

### **Background to the Study**

The broad subject area of post registration education for critical care practice is of particular personal interest as critical care practice has been the focus of the author's professional development for the last eight years with substantial involvement in post registration education in this field throughout this time. Indeed, the author's

involvement in post registration education for specialist nursing practice inspired current Masterate study as a means of professional development as a qualified practitioner and an educator. Interest in the specific study area of critical care education in the South Island of New Zealand has evolved from several perspectives. As a recent migrant from the United Kingdom to the South Island of New Zealand, it seemed that educational provision (or access to) for critical care nursing practice in the South Island was not comparable with that of the majority of critical care areas in the United Kingdom (UK). Whilst it is clear that the population distribution in the South Island is also significantly different from that of the UK, the provision of intensive and critical care services in metropolitan centres in the South Island is not dissimilar to that in many centres in the UK. Yet, following preliminary inquiry it was evident that nurses practising in one large tertiary hospital with substantial intensive and critical care provision did not have access to a critical care nursing education programme based in the South Island.

This led to an assumption that the proportion of nurses practising in critical care in the South Island who hold a post registration qualification in critical care might be low (when compared to critical care contexts elsewhere). A further assumption that critical care nurses in the South Island might either have to travel in order to undertake post registration education, or obtain qualifications elsewhere also warranted further exploration. An extensive literature search showed that critical care education in the South Island had not been studied previously. Moreover, the author found only one article that referred to critical care nursing education in New Zealand (Hewitt-Taylor 1998 – reference to paediatric intensive care education). It was therefore necessary to undertake a preliminary research study in order to explore the current state of education for critical care nursing practice in the South Island and more fully understand the study context (Hardcastle 2003).

Given the population distribution of critical care services and nurses practising within the specialty, and the author's proposal that educational provision and access within the South Island is inadequate for contemporary critical care practice (Hardcastle 2003), a rudimentary hypothesis emerged concerning the potential of distance learning within the educational preparation of critical care nurses in the South Island. The provision of education for specialist practice in critical care across the South Island is certainly a challenging prospect in terms of delivery, assessment, clinical experience, accreditation and financial viability. As distance education approaches to post registration education have been adopted in other countries, the author was inspired to examine the potential scope of distance education within critical care and, more specifically, within the South Island context.

### **Significance of the Study**

Concern regarding the lack of adequately qualified and experienced critical care nurses is presently a global issue that is all too apparent in New Zealand (Johnston 2002). Some countries have previously undertaken exploratory studies in order to investigate the educational needs of critical care nurses within specific regions so

that educational planning could address inadequacies in educational provision or focus (Queensland Nurses Union of Employees 1993, Restas 1993, Chaboyer *et al* 1997, Hewitt-Taylor 1998). Indeed, the deficits revealed in the Queensland studies resulted in significant educational restructuring and financial procurement from local governments in order to address educational provision that was previously inadequate and encourage staff retention (Hendricks-Thomas, Crosby & Mooney 1995, Chaboyer *et al* 1997). Yet the state of education for critical care nursing practice in New Zealand had not been considered in published literature prior to this author's preliminary research studies.

This thesis not only provides an unparalleled exploration of critical care education in the South Island, it also provides a comprehensive inquiry concerning the concept of 'effective' education for critical care nursing practice and the potential of distance approaches to teaching and learning therein. Whilst several authors have presented literature pertaining to the effectiveness of critical care education, the predominant focus is upon outcome criteria, and how they may be best achieved in terms of teaching strategies, assessment methods, course structure and curricula. Although it is important to evaluate the process and outcome for learning situations, one would argue that focusing predominantly on outcome criteria encourages a learning environment that is prescriptive and goal oriented rather than learner centred and individualistic. One would further propose that, in order for education to be effective for nursing practice, educational programmes should facilitate individual learners to utilise personal learning strategies so that they may understand and enhance their own practice. The thesis therefore aims to expand the current conceptualisation of effective education by exploring the meaning that effective education for critical care nursing practice holds for critical care nurses practising in the South Island.

The notion of distance education within the specialty of critical care education is not entirely new. Moreover, several authors refer to the use of distance education strategies within critical care nursing programmes (see for example Hewitt-Taylor 1998, 1999, Camsooksai 1999, Manley 2000). However, the potential or scope that distance education may hold for critical care nursing education has not been explored in existing literature. The thesis therefore represents an original and comprehensive inquiry that may significantly influence the future of post registration education for critical care nursing practice in, and beyond, New Zealand.

### **Aims and Objectives of the Study**

The thesis utilises and expands upon relevant literature and information gained during the course of prior research undertaken by the author in order to compare and contrast the emerging concept of effective education for critical care practice with existing concepts of distance education. The intention is to more clearly understand:

- What 'effective' education means for nurses practising in critical care environments in the South Island
- The relationships between education and practice development

- The potential of distance education within critical care nursing education
- The specific application of distance education approaches for critical care nursing education and practice development in the South Island of New Zealand

In order to focus the inquiry on teaching and learning within the context of critical care nursing it is necessary to first consider the broader contexts of nursing education, critical care nursing practice and the specific characteristics of nursing education in New Zealand and the South Island. Chapter Two thus provides a comprehensive discussion concerning prevalent issues within nursing education and professional practice development. Influential theories and philosophies are discussed within broad and study specific contexts in order that the reader may more fully comprehend the assumptions and values that underpin contemporary education and practice. National and international approaches towards general and specialty nursing education and professional regulation are then discussed with particular reference to professional standards and accountability in practice. It is important to note, however, that the literature, perspectives and discussion surrounding general and specialty nursing education reflect predominantly Western values due to an absence of available literature concerning broader perspectives. The chapter concludes with a detailed description of the primary context of the inquiry and presents preliminary research findings concerning the current issues relating to critical care education in the South Island.

The effectiveness of past and current ventures in critical care nursing education has received a certain amount of attention within research and literature pertaining to nursing education and specialty practice, although interpretation of effectiveness as a concept is somewhat varied. Chapter Three begins with a review of existing conceptualisations and evaluation of effective education for critical care nursing. The assumptions and values reflected in current literature are highlighted in order that the determinants of effective education may be considered from various perspectives. Literature concerning the meaning of education for critical care nursing practice is then discussed with reference to existing concepts of effective education and the author's own research concerning the meaning of effective education for critical care nursing practice within the study context. As much of the critical care education literature reviewed focuses on the effectiveness of specific approaches to, or structure of, educational programmes, popular approaches to teaching and learning in critical care are then discussed with reference to existing and emerging concepts of effective education.

In order to consider the appropriateness or potential scope of distance education in critical care education it is necessary to explore the concept of distance education within adult and professional education. The second section of Chapter Three thus explores distance approaches to teaching and learning within relevant literature, research and adult learning theory. Existing applications of distance approaches to teaching and learning in

nursing education are then reviewed in order to identify the existing scope and implications of distance education within the profession and for specialty practice.

Chapter Four begins by presenting an enhanced conceptualisation of effective education for critical care nursing practice developed from new and existing information, literature, and research and a greater understanding of what effective education means to nurses practising in critical care environments. The composite description of effective education is presented as a new perspective on effective education for critical care nursing practice. This perspective is then integrated into a model for critical care education that reflects the most fundamental issues within effective education for critical care nursing practice in New Zealand. Chapter Five explores the new, emerging concept and model for education within the context of contemporary approaches to, and principles for distance education. The second section of Chapter Five then utilises the model for critical care education in order to examine the potential of distance education within critical care nursing education and the study context.

The thesis concludes with a presentation of the author's conclusions regarding the potential of distance education within critical care nursing education in New Zealand and recommendations for the development of an educational strategy for critical care nursing practice in the South Island. A glossary of terms is included in the appendices in order to provide greater clarity regarding terminology that may be interchangeable, specific to nursing or subject to situational interpretation.

### **Summary**

The study provides a unique exploration of critical care nursing education in New Zealand and the potential of distance education as an approach to professional education for specialty nursing practice. The inquiry highlights the significance of individual learners and personal practice development within the broad scope of critical care nursing and professional practice. Aspects of nursing education that have traditionally been grounded in clinically based teaching, learning and assessment are explored from alternative perspectives that may enable the provision of comprehensive distance critical care education for nurses throughout the South Island within national professional guidelines for post registration nursing education (NCNZ 2001).