

---

Theses

---

2016

An investigation of nurse education service models in acute care metropolitan hospitals across Australia

Carolyn Keane  
*The University of Notre Dame Australia*

Follow this and additional works at: <http://researchonline.nd.edu.au/theses>



COMMONWEALTH OF AUSTRALIA  
Copyright Regulations 1969

WARNING

The material in this communication may be subject to copyright under the Act. Any further copying or communication of this material by you may be the subject of copyright protection under the Act.  
Do not remove this notice.

---

Publication Details

Keane, C. (2016). An investigation of nurse education service models in acute care metropolitan hospitals across Australia (Doctor of Nursing). University of Notre Dame Australia. <http://researchonline.nd.edu.au/theses/138>

This dissertation/thesis is brought to you by ResearchOnline@ND. It has been accepted for inclusion in Theses by an authorized administrator of ResearchOnline@ND. For more information, please contact [researchonline@nd.edu.au](mailto:researchonline@nd.edu.au).



# Chapter 5: Discussion of Findings

*Wisdom ... comes not from age, but from education and learning*

-Anton Chekhov-

## 5.1 Introduction

In this chapter, the overall findings of this research are discussed further, including in relation to the existing research, literature and theories examined. This study was designed to investigate nurse education service models in acute care metropolitan hospitals across Australia and provide recommendations for future service delivery. This study has demonstrated that the majority of nurse education services across Australia use a combination model (57%, n=225) but that in comparing a centralised, decentralised and combination model, a centralised model undertakes more functions and holds more advantages in supporting the delivery of nurse education services across an organisation.

This section commences with a comparison of the qualitative and quantitative research findings from the three phases of the study and then compares the research findings with the existing literature. The new knowledge gained and how this project addresses the gaps in the literature are then presented, followed by the research limitations.

## 5.2 Comparison of the Qualitative and Quantitative Findings

For this study, the qualitative and quantitative data collection was undertaken in separate phases as outlined in Chapter 3. A research framework using mixed methods allowed an investigation of the nurse education service model at one acute care metropolitan hospital in Perth, W.A., followed by the expansion of the study's scope to

include a broader investigation of nurse education service models in acute care metropolitan hospitals across W.A., and then across Australia.

Phase one involved holding face-to-face interviews and a focus group with senior nurse educators and focus groups with junior nurse educators at a major teaching hospital in Perth, W.A., to gain qualitative data about the nurse education service model used at that organisation. Phase two of the study used face-to-face interviews with the coordinators of nurse education services at both public and private acute care metropolitan hospitals in W.A. (six hospitals) and focus groups with senior and junior nurse educators to gain qualitative data about the nurse education service models used at these organisations. Phase three of the study consisted of a national survey of nurse educators in acute care metropolitan hospitals across Australia. Sixty-five hospitals (employing approximately 1500 nurse educators) were considered eligible for inclusion in the study. The data from phase three were analysed using descriptive statistics.

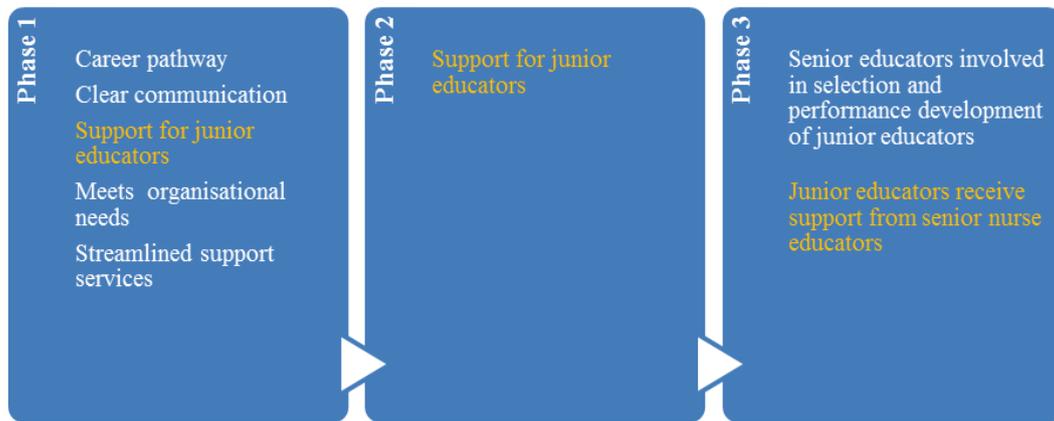
## **5.2.1 Comparing the Different Nurse Education Service Models**

### **5.2.1.1 Centralised Nurse Education Service Model**

In a centralised nurse education service model, there is an organisational-wide approach to staff training in which a central authority or department has the responsibility of meeting staff training requirements. In this model, all education staff, even those placed within the clinical areas, report centrally to the education department and the coordinator of the service (Cummings & McCaskey, 1992).

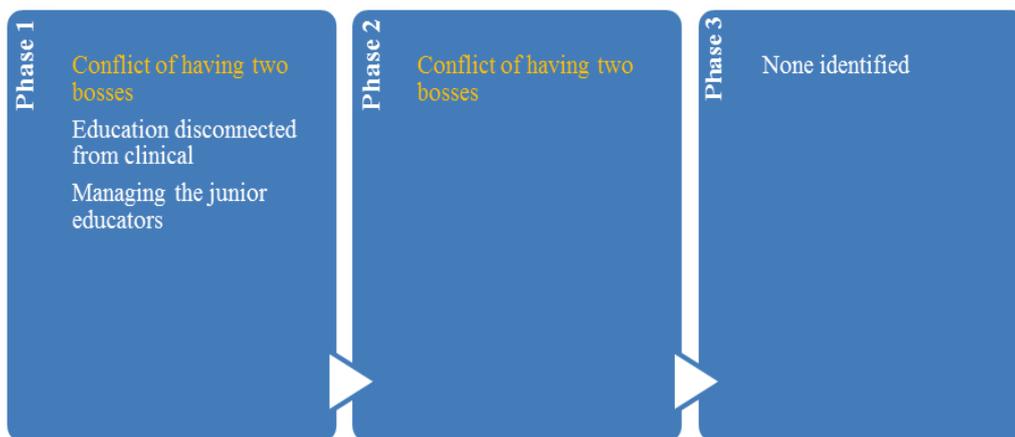
In phase one, nurse educators described the strengths of their centralised service model as allowing for a career pathway within nurse education, having clear communication channels, supporting junior educators, meeting the needs of the organisation and providing streamlined support services. In phase two, nurse educators also identified the strength of a centralised model as the support it afforded junior nurse educators. These findings were confirmed in phase three, as the nurse educators working in a centralised model demonstrated the highest level of agreement (62%, n=78) with the

statement ‘The senior educators are involved in the selection and performance development of junior educators’, and the highest level of agreement (86%, n=106) with the statement ‘Junior nurse educators receive support from senior nurse educators’ (see Figure 5.1).



**Figure 5.1. Strengths of a Centralised Nurse Education Service Model**

The weaknesses of a centralised model were also identified. In phase one, the weaknesses were described as the conflict of having two bosses, problems with managing junior educators and education being disconnected from the clinical areas. In phase two, the potential conflict of having two bosses was also identified as a weakness of a centralised model. However, these findings were not supported in phase three, where the results of the survey revealed that no weaknesses of a centralised model were identified by nurse educators (see Figure 5.2).

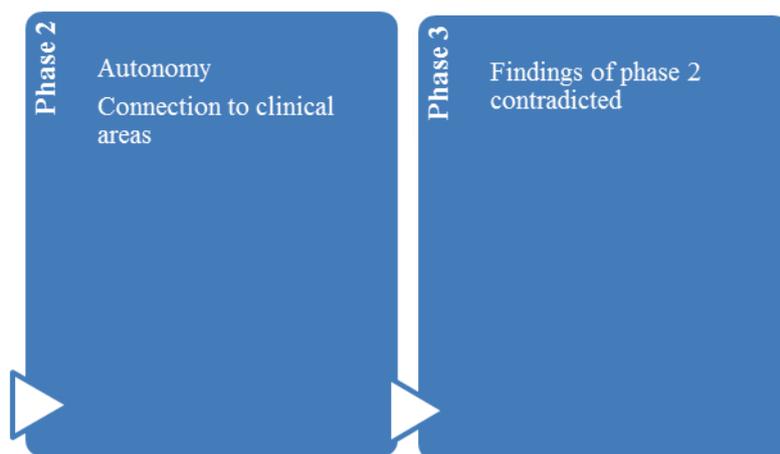


**Figure 5.2. Weaknesses of a Centralised Nurse Education Service Model**

### 5.2.1.2 Combination Nurse Education Service Model

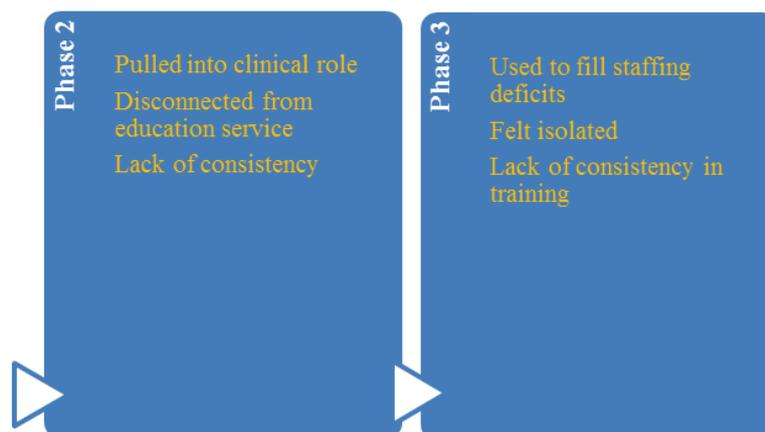
In a combination model, the onsite training department, in which educators are located, delivers programs across the organisation (e.g., staff orientation). There are also educators located in the clinical areas that report to the nurse unit managers, who are not connected to the training department (Cummings & McCaskey, 1992).

Phase one did not address the combination model, as it involved collecting qualitative data from nurse educators within a centralised nurse education service model only. In phase two, autonomy was identified as a strength of a combination nurse education service model by nurse educators. In phase three, however, this was contradicted, as ‘Allows autonomy’ was rated significantly higher by nurse educators within a centralised model (87%, n=109) compared to those working within a combination model (70%, n=179). Another strength of the combination model that was raised in phase two was educators’ connection to clinical areas; however, this was also contradicted in phase three, with ‘allows continuous awareness of learning deficits at ward level’ rated higher (78%, n=98) by nurse educators in a centralised model than by those in a combination model (75%, n=168), as was ‘maintains visibility of nurse educators in clinical areas’, at 88% (n=110) by nurse educators in a centralised model and 80% (n=180) by nurse educators in a combination model (see Figure 5.3).



**Figure 5.3. Strengths of a Combination Nurse Education Service Model**

In phase two, the weaknesses of a combination model raised included being pulled into a clinical role, disconnection from the education service and a lack of consistency. This was supported in phase three, as a significant result was seen with 63% (n=142) of nurse educators in a combination model stating that they were used to fill staffing deficits, which was the highest level of agreement seen in comparing the combination, centralised and decentralised models. Fifty-four per cent (n=121) of nurse educators in the combination model also agreed that they felt isolated, which was higher than the results reported for a centralised model, at 42% (n=52). Finally, 65% (n=147) of nurse educators in a combination model agreed that there was a lack of consistency in training across the organisation, compared to 36% (n=45) from a centralised model (see Figure 5.4). The decentralised nurse education service model was not able to be investigated in phase two as none of the W.A. hospitals included in the study used this education service model type.



**Figure 5.4. Weaknesses of a Combination Nurse Education Service Model**

The main story weaved by the nurse educators in the phase one interviews and focus groups was around the high level of support, clear direction and education opportunities for junior educators that a centralised nurse education service model can offer. This is illustrated throughout phase one by comments such as: ‘We are able to support the SDNs and train them how to teach’ (Phase one, interview two) and ‘I think it’s the supportiveness and the cohesiveness that everyone is singing off the same page, we are all experts in education or at least advancing to that’ (Phase one, interview four).

In phase two this story was further explored with nurse educators from centralised and combination models. Nurse educators from a centralised model confirmed the findings of phase one by also describing the main strength of the model as being support for junior educators. Comments highlighting this included: ‘Having that senior level of support around you is a really positive thing as I said not only for ease of information around you but if you’ve got a problem and need to sound someone out there is someone there’ (Phase two, focus group two). Strengths of the combination model were also uncovered and included the autonomy it afforded nurse educators and their connection to clinical areas. These were identified through comments such as: ‘Gives us autonomy to do training needs analysis and find that gap and fill the gap’ (Phase two, focus group four) and:

Being at the grass root levels we can see where there are deficits, we can see where there are knowledge gaps and it becomes easier for us to say right we need help in this area and we know exactly who to ask. (Phase two, focus group five)

The story is concluded in phase three, with further confirmation of the previous findings regarding the strengths of the centralised model with a significant result seen of only 42% (n=53) of nurse educators in a centralised service model agreeing or strongly agreeing to feeling isolated which was a lower level of agreement that was seen by nurse educators from combination and decentralised models. Many other strengths of the centralised model were also uncovered during phase three. However, the findings in phase two around the strengths of the combination model were contradicted with ‘allows autonomy’ being rated significantly higher by nurse educators within a centralised model (87%, n=109) compared to those working within a combination model (70%, n=179) and ‘allows continuous awareness of learning deficits at ward level’ rated higher (78%, n=98) by nurse educators in a centralised model than by those in a combination model (75%, n=168), as was ‘maintains visibility of nurse educators in clinical areas’, at 88% (n=110) by nurse educators in a centralised model and 80% (n=180) by nurse educators in a combination model.

## **5.2.2 Responsibilities and Functions of Nurse Education Service**

### **Models**

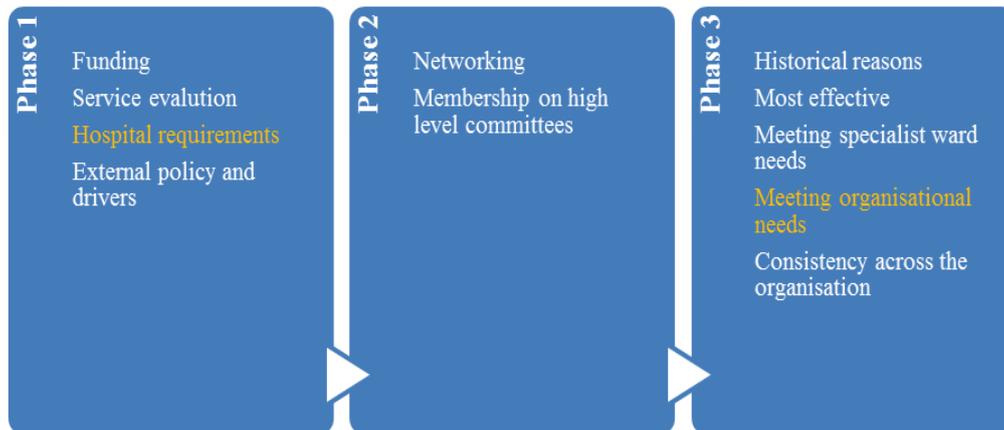
In phases one and two, the functions undertaken by the nurse education services were outlined as delivering mandatory training, staff induction and orientation, support with accreditation, workforce development, informal coaching, delivering the graduate nurse program, coordinating undergraduate nurse placements, area-specific in-service sessions and interprofessional training. These findings were reinforced in phase three, as the functions ranked as undertaken by the majority of nurse education services were ‘orientates and supports new staff’ (98.5%, n=387), followed by ‘undertakes staff mandatory training and competencies’ (98%, n=385) and ‘meets accreditation needs for the hospital’ (96.4%, n=379). Overall, however, nurse educators from a centralised model had the highest level of agreement with the most functions listed, demonstrating that the centralised model undertook more responsibilities and functions than the combination or decentralised nurse education service models.

### **5.2.3 Choice of Nurse Education Service Model**

In this section, the results across the three phases of the study are compared to investigate common findings regarding why the type of nurse education service model in operation was chosen. In phase one, the factors that influenced the service model being used were seen as how the allocation of funding to the nurse education service was administered, evaluation of how well the service was performing, if the needs and requirements of the hospital were being met and external policy such as area health service changes and implementation of the new NSQHSS.

In phase two, the coordinators of nurse education services highlighted networking with key stakeholders within the organisation and membership on high-level committees to influence decisions and raise education issues as how they influenced the nurse education service model. In phase three, nurse educators and coordinators indicated that the nurse education service model being used was the one chosen because of historical reasons, was the most effective, met specialist ward needs, met the needs of the organisation and allowed consistency across the organisation. Thus, the only

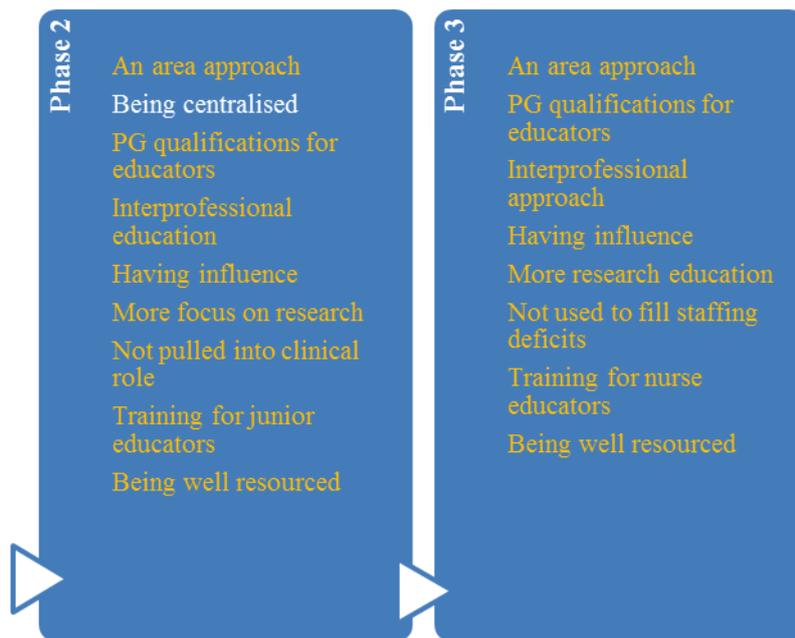
common factor seen as influencing the choice of nurse education service models across all three phases of the study was that it met the needs of the organisation (see Figure 5.5).



**Figure 5.5. Choice of Nurse Education Service Model**

### 5.2.4 Characteristics of an Ideal Nurse Education Service Model

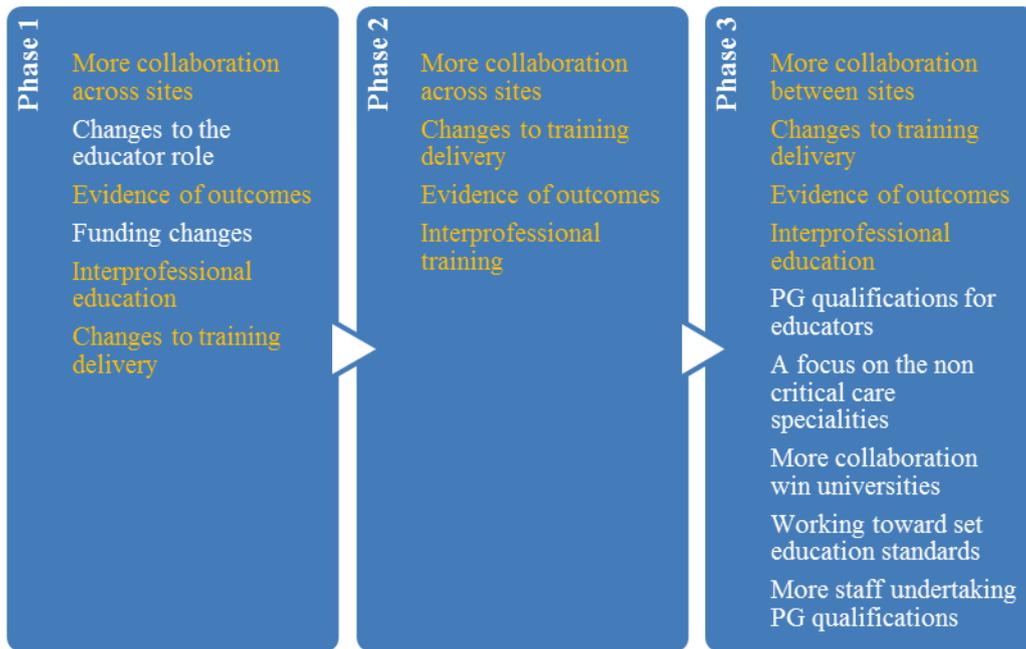
The characteristics of an ideal nurse education service model were not examined in phase one. In phase two, nurse educators identified the characteristics of an ideal nurse education service model as including an area approach, being centralised, nurse educators having postgraduate qualifications, interprofessional education, having influence, more focus on research, educators not pulled into a clinical role, training for junior educators and being well resourced. In phase three, nurse educators agreed that the following were essential characteristics of an ideal nurse education service model: an area/district health service approach (68.4%, n=269), postgraduate education qualifications for nurse educators (86.3%, n=339), an interprofessional approach (93.3%, n=367), having the ability to influence change (95.9%, n=377), includes research education (88%, n=346), nurse educators not filling staffing deficits (91.3%, n=359), training for nurse educators (97.4%, n=383) and being well resourced (97.5%, n=383) (see Figure 5.6).



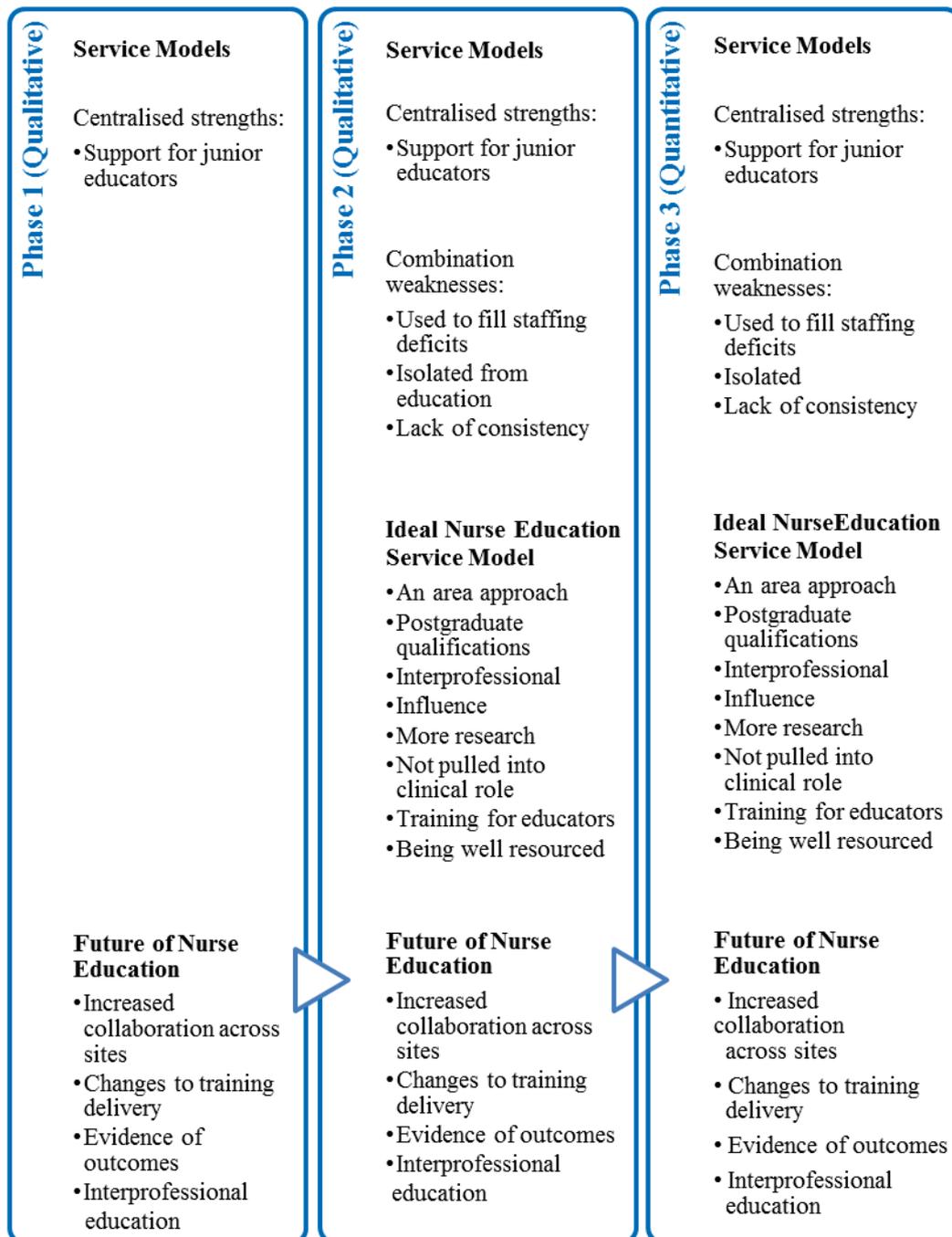
**Figure 5.6. An Ideal Nurse Education Service Model**

### 5.2.5 Future Priorities for Nurse Education Services

In phase one, nurse educators outlined future priorities of nurse education services as including more collaboration across sites, changes to the nurse educator role, evidence of outcomes, funding changes, interprofessional training and changes to training delivery. In phase two, similar priorities for the future were highlighted including more collaboration across sites, changes to training delivery, evidence of outcomes and interprofessional training. In phase three, nurse educators agreed that increased collaboration between hospital sites (86.5%, n=340), strong evidence of education outcomes (92.3%, n=363), changes to training delivery including more flexible teaching modalities (92.6%, n=364), more self-directed education (86.7%, n=341) and interprofessional education (88.8%, n=349) were priorities for the future of nurse education services (see Figure 5.7). The consistent findings across all phases of the study are summarised in Figure 5.8.



### 5.7. Future Priorities for Nurse Education Services



**Figure 5.8. Summary of Consistent Findings across the Phases**

In addition to the findings that were consistent across the three phases of the study, there were findings that were found to be inconsistent across the different phases. These included no clear agreement on the factors affecting the organisations' choice of nurse education service model, and that the weaknesses of the centralised nurse education service model identified in phase one and strengths of the combination model identified in phase two were contradicted by the findings from phase three.

## **5.3 Comparison of Findings to the Literature**

In examining the findings of this study, it is important to review the existing literature in this area to identify similarities and differences between the findings and the literature, to establish how this study fits within the framework of established knowledge and its relationship to accepted theories.

### **5.3.1 Nurse Education Service Models**

As discussed in Chapter 2, there is limited published research that has been undertaken in investigating nurse education service models. The findings of this study are now compared with the discussion papers that have been published on nurse education service models and examined against the findings of the one US and one Canadian study published in this area.

Phelps published a discussion paper in 1990 that described how the author changed the staff development structure from a decentralised function to a centralised one within a major teaching hospital in the US. This was triggered by the need for the service to be able to develop a clear mission, demonstrate results and be responsive to institutional needs (Phelps, 1990). Phelps describes centralising the service to allow orientation and continuing education programs to be developed at different times and in different ways to address the specific needs of part-time and pool staff. Policies were developed around orientation so that a standardised approach could be applied.

Centralisation allowed the development and implementation of programs across multiple areas, reducing repetition and increasing cost-efficiency (Phelps, 1990). The change to a centralised staff development model was also able to address the number of credentialing, licensing and accreditation requirements of the organisation and the individual. The staff development department developed systems to maintain records and monitor the competencies of its practitioners. Finally, the service was able to affect the motivation of staff to learn and develop their practice by the service becoming increasingly visible and sharing its leadership skills and goal development (Phelps, 1990).

The benefits of a centralised model as outlined by Phelps (1990) were also found in this study, with nurse educators in phase one within a centralised model describing its strengths as meeting the needs of the organisation, allowing nurse education service planning and providing administrative and secretarial support. In phase three, there were also significant findings with nurse educators in a centralised model agreeing that the model allowed the educators to obtain an organisational-wide view and maintain their visibility in clinical areas.

In the first of the two studies undertaken specifically focussing on nurse education service models, Blocker (1992) undertook a national survey of staff development departments in the US to determine whether they were using a centralised, decentralised or combination model. The survey asked about department organisation, instructor role, staff title, core responsibilities, percentage of work for various departments, department head and staff educational preparation and demographic data. The main purpose of Blocker's (1992) research was to identify the organisational models employed by staff development departments of similar healthcare facilities. The organisational models were defined within the survey as:

- Centralised—Instructors are generalists who are not assigned to specific units.
- Decentralised—Instructors are specialists who are assigned to and/or are based on specific units.
- Combination—Some instructors may be either generalists or specialists.

These definitions differ from others given in the literature and those used in this study to define the different nurse education service models.

In this study, a centralised nurse education service model is defined as one in which there is an organisational-wide approach to nurse training, where a central authority or department has the responsibility of meeting nurses' training requirements. In a centralised model, all education staff, even those placed within the clinical areas, report centrally to the education department and manager (Cummings & McCaskey, 1992). A decentralised nurse education service model is defined as one in which there is no central training department, as educators within individual clinical areas are responsible for meeting the training needs of staff within their areas and report directly to the nurse unit managers (Cummings & McCaskey, 1992). A combination nurse

education service model is defined as one in which there is a centralised education department delivering education and training across the organisation as well as clinically placed educators who are managed by the nurse unit managers and are independent of the education service. There is no relationship or reporting lines between the education department and the nurse educators employed and managed by the nurse unit managers (Cummings & McCaskey, 1992). Comparing Blocker's (1992) definitions with those used by this study is difficult, as a centralised model can support specialists who are based on specific units but who still report centrally to the coordinator of the education service, and can also consist of both generalists and specialists.

Blocker's (1992) research consisted of a national survey across 45 states of the staff development departments of 117 hospitals, similar to the hospital used in phase one. These hospitals were non-governmental, not-for-profit, general medical-surgical hospitals containing 300–1000 beds. Forty-eight responses (a 41% response rate) were received from healthcare facilities in 30 states. Of the responding staff development departments, 11 (23%) used a centralised model for their staff development service (average bed number was 569), 11 (23%) used a decentralised model (average bed number was 535) and 26 (54%) used a combination model (average bed number was 767). These findings support those of this study, with a combination model being the most commonly used (57%, n=225) except in hospitals with < 100 beds, which used a combination or centralised model in equal numbers.

In Blocker's (1992) study, staff development departments were asked to identify what services they provided from a list of 14 core responsibilities and functions listed in the survey. The researcher did not explain how her list of responsibilities and functions was developed for inclusion in her survey; however, they are similar to those outlined by participants in phases one and two of this study and included in the survey in phase three. Both studies list orientation and mandatory training as the functions most often undertaken by nurse education service models. A point of difference was that Blocker's (1992) study found that a combination model had more functions than a centralised or decentralised model, whereas this study found that a centralised model had more functions. This appears to be because the list of functions in Blocker's study

was more ward-focussed than the list of functions generated by the nurse educators during phases one and two of this study. This list in this study included more organisational-wide functions, such as coordinating the graduate nurse program, which would more likely be supported by a centralised service model.

Other factors that were investigated in Blocker's (1992) study included the nature of the hospital, whether it was a multi-hospital site or single hospital organisation, the placement of the staff development service within or outside the nursing division, the number of staff employed by each service, the education preparation of the department heads and the educational preparation of the instructors. These factors were not examined in this study.

In Blocker's (1992) study, the researcher used the results of her survey to implement a combination nurse education service model at her home organisation, as it was used by the majority of multi-hospital staff development departments (69%, n=8) and the overall majority of respondents (54%, n=26). The data also indicated that the combination model had a greater number of instructors with more varied educational preparation, supported hospitals with more beds and had more diverse functions.

Identified limitations of Blocker's (1992) study were that the data were self-reported and the interpretation of certain questions varied (e.g., FTE versus number of staff). Moreover, no attempt was made to randomise subjects or perform statistical analysis beyond percentages and means. The author concluded by stating the data obtained could be used by staff development departments when choosing an organisational model.

Also published in 1992, Cummings and McCaskey's discussion article outlined the advantages and disadvantages of centralised and decentralised hospital education models and then described the implementation of a combination model for staff development in a large hospital in the US. In describing a centralised model for staff education, the authors' highlighted that this type of model provides for consistent content and teaching methods, effective use of personnel, clear identification of

educators to the department and hospital staff and the control of all functions of the department.

These identified strengths of a centralised model as described by Cummings and McCaskey (1992) were also findings of this study, with areas raised by nurse educators as strengths of a centralised model in phases one and two including:

- a consistent approach by the use of policies and processes
- meeting organisational needs by delivering training across a number of areas
- more comprehensive planning for service delivery
- prioritising allocation of resources to meet the training needs of the hospital
- streamlined support services to control aspects of the service such as maintaining records, purchasing and venue management.

Phase three also supported the findings of Cummings and McCaskey (1992), with only 36% (n=45) of nurse educators in a centralised service model agreeing that there was a lack of consistency in training across the organisation, which was the lowest level of agreement with this statement across the three models.

Cummings and McCaskey (1992) identified the weaknesses of the centralised model as inhibiting the educator's creativity and reducing autonomy, which could lead to dissatisfaction with the role. These weaknesses were contradicted by the significant findings of this study in phase three, which disproved the idea that a centralised model reduces autonomy due to nurse educators working within a centralised model reporting the highest level of agreement with the statement 'allows autonomy', at 87% (n=109).

Cummings and McCaskey (1992) described a decentralised model of education as allowing immediate awareness of education needs at the local level, supporting educational flexibility, allowing educators to maintain specialised expertise and supporting innovation and creativity. One of these identified strengths of a decentralised model was also found in phase three of this study, with nurse educators from a decentralised model rating higher than those working in other models (86%, n=12) the fact that their model allowed continuous awareness of learning deficits at the ward level. However, another of the strengths described by Cummings and McCaskey (1992) was contradicted by the findings in this study, as nurse educators in the

decentralised service model had the lowest level of agreement with the statement ‘allows for development of specialist clinical knowledge and skills’.

Cummings and McCaskey (1992) discussed that the disadvantages of a decentralised model might include a lack of unified educational policies and procedures, a lack of communication between educators and the loss of support for the role of the educator in the organisation. This was supported by the findings in phase three of this study, with 100% (n=14) of nurse educators from a decentralised model agreeing that they felt that there was a lack of consistency in training across the organisation and only 50% (n=7) of nurse educators in a decentralised model feeling that junior nurse educators received support from senior nurse educators.

In describing a combination model, Cummings and McCaskey (1992) noted that there was a centralised professional development division at their organisation, with educators responsible for orientation and other generic programs and reporting to the Associate Director of Nursing. They also had decentralised educators in the clinical areas who addressed specialised learning needs and unit-specific orientation and reported directly to the nurse manager of the clinical area. The authors’ outlined that they felt their combination model combined the advantages of both a centralised and decentralised model, while also acknowledging that the effectiveness of any department within an organisation depends on more than just the model in use.

In the second of the two studies undertaken specifically looking at nurse education service models, Sheriff and Banks (2001) undertook a qualitative study in an academic health science centre in Southern Ontario, Canada. This was a 1196-bed organisation situated across four hospital sites. Three of the sites provided acute care, with the remaining site providing complex continuing care.

Sheriff and Banks (2001) described their education model as one in which educators were assigned to clinical programs. This meant that they were decentralised into the program but reported centrally to the director of the Education and Development Department. Organisation development specialists and patient education specialists were aligned with clusters of programs and also reported to the director of the

Education and Development Department. Sheriff and Banks (2001) describe this model as a combination model, but with all educators reporting back to the one director of the Education and Development Department, this was actually a centralised model as described in the literature and in this study.

In Sheriff and Banks (2001) study, focus groups were held with educators, clinical managers, senior managers and directors, with a separate focus group held for each cluster of participants and the sessions being led by an experienced external facilitator. In their study, the educators assigned to clinical programs overwhelmingly expressed a desire to retain their matrix model. The clinical manager group also expressed a desire to maintain the education model that was being used. The majority of directors expressed satisfaction with the current model. Several of the senior managers believed they were not in a position to recommend whether educators should report centrally or not. The education, organisation development and patient education specialists expressed the desire to maintain the combination model.

The results of Sheriff and Banks (2001) study recommended that the combination model for education and development be retained at the organisation. It was overwhelmingly the preferred choice of the educators and clinical managers who were closest to the work involved and who identified that this model addressed the issues and concerns they had experienced with previous models. However, some directors thought that educators should be completely decentralised, as they did not have control over the educators' activities. The strengths of the model were identified as enhanced support for education, centralised planning and resource development. The efficiency of developing projects that crossed a number of clinical areas or could be implemented across the whole organisation, reducing the silo effect and improving communication, was also mentioned.

The findings of the Sheriff and Banks (2001) study were supported in this study, with nurse educators in phase one identifying the strengths of a centralised model as allowing for a career pathway within nurse education and supporting the junior nurse educators, meeting the needs of the organisation around comprehensive planning for service delivery and prioritising allocation of resources and supporting clear

communication channels. In phase three, 85% (n=106) of nurse educators in a centralised service model agreed that junior nurse educators received support from senior nurse educators. This was the highest level of agreement across the three service models. They also agreed that a centralised model allowed nurse educators to obtain an organisational-wide view (90%, n=112), again at the highest level of agreement across the three models.

The limitations identified with the Sheriff and Banks (2001) study were that the data might reflect the biases of the organisation and the results might not be generalisable to other hospital settings. Further, the results might only be useful to large, multi-site, academic hospitals with links to a university.

Finally, in 2006, Haggard published a two-part editorial that discussed the different organisational approaches to education and their strengths and weaknesses (Haggard, 2006a; Haggard, 2006b). Haggard outlined the advantages of a centralised staff development service as including strong identification and loyalty of staff, clear lines of communication, common goals and clear expectations of the department's role and objectives. Some of these strengths of a centralised model as identified by Haggard were also found in this study, including the raising by nurse educators in phase one of clear communication channels as a strength of their centralised model and that the model allowed for comprehensive planning for service delivery and allocation of resources.

Haggard (2006a) outlined the disadvantages of a centralised model as including no hospital-wide education as only nursing needs were addressed, limited bedside contact and the perception that educators lacked clinical expertise. These weaknesses of a centralised model were not found in this study. Nurse educators in phase one did raise feeling disconnected from the clinical area as a weakness, but in phase three this was contradicted, with nurse educators from a centralised model agreeing more highly than those working in other models that their model allowed for continuous awareness of learning deficits at ward level (78%, n=98). Nurse educators in a centralised model also had the highest level of agreement that this model allowed for development of specialist clinical knowledge and skills (90%, n=112).

These differences in findings between this study and that of Haggard (2006a) may be due to the fact that, these days, education services within healthcare organisations cater for all staff groups, not just nursing, and so deliver a hospital-wide service. Also in this study, centralised nurse education services base their junior educators within clinical areas. Thus, even though they report to the education service, they are part of the clinical team, making them feel more connected to the clinical areas and able to continue to develop their clinical expertise.

Haggard (2006a) summarised the advantages of a decentralised approach as including closer relationships with nursing units, more patient contact and more awareness of nurses' education needs. However, these findings were contradicted in this study, with nurse educators in a decentralised model demonstrating a lower level of agreement than those in a centralised or combination model that they could maintain the visibility of nurse educators in clinical areas and that they had continuous awareness of learning deficits at ward level. As mentioned above, the findings of this study may differ from Haggard's (2006a) article because both centralised and combination models have their junior educators situated within the clinical areas, which mitigates these perceived advantages of a decentralised service model.

Haggard (2006a) outlined the disadvantages of a decentralised model as including a lack of emphasis on non-nursing departments, job dissatisfaction among educators who enjoyed formal teaching, difficulty communicating within the department and inefficiencies in resource allocation. Some of these disadvantages were also findings of this study, with 86% (n=12) of nurse educators in a decentralised model identifying that they felt isolated, which was the highest level of agreement across the three models, and 100% (n=14) of nurse educators in a decentralised model agreeing that there was a lack of consistency in training across the organisation, which again was the highest level of agreement seen across the three models.

Haggard (2006a) supported a combination model in which some functions were centralised, such as orientation and record keeping, and others were decentralised, such as unit-specific in-service training. She emphasised that the challenge of dealing with any of these models is keeping the department relevant to the organisation and its

strategic direction, adapting to the rapid pace of changing healthcare, juggling multiple priorities and keeping educational practitioners satisfied with their jobs and their service.

This study found that a centralised nurse education service model is able to deliver on the functions outlined by Haggard (2006a) above. A centralised nurse education service model is able to stay relevant in supporting the organisation's strategic direction, adapt to the rapidly changing healthcare environment and support nurse educators in their roles to ensure job satisfaction.

## **5.4 Comparison against Relevant Theories**

In Chapter Two, the most relevant theories affecting nurse education services were discussed including lifelong learning, organisational learning and role theory. This study found that the use of different nurse education service models can affect the delivery of education to staff within the healthcare organisation. The following section compares the findings of this study with the theories outlined in Chapter Two.

An efficient nurse education service that adequately supports the learning needs of the organisation as a whole and of the individual is crucial to develop and support lifelong learning. Nurse education services need to enable practicing nurses to initiate and undertake personal and professional learning opportunities throughout their career (Gopee, 2005). The findings of this study support lifelong learning theory by recommending the centralised nurse education service model as an effective nurse education service model to support the delivery of ongoing education and training for staff.

The results from this study support organisational learning theory, as they demonstrate the advantages of a nurse education service model that delivers learning through all levels of the organisation. The study findings demonstrate the importance of meeting the learning needs of the organisation from the level of the individual to the inter-organisational level. Specifically, individual learning needs are met by delivering

clinical training at the bedside. Team training on the ward is achieved by delivering in-service sessions. Organisational-wide training includes such programs as study days. Finally, inter-organisational training includes supporting postgraduate programs. The centralised nurse education service model was able to demonstrate that it is able to support organisational learning at each of these levels.

In regards to role theory, role conflict was highlighted in the early phases of this study by junior nurse educators identifying this as a potential weakness of a centralised nurse education service model, as they reported to the senior educator but were often tasked to do things outside their role by the nurse unit manager, causing conflict. In phase three of the study 98%, (n=385) of the nurse educators agreed/strongly agreed that clear role definition was an important aspect of an ideal nurse education service model and the centralised model was shown to require educators to undertake less duties outside their role. The findings of this study support role theory through the identification of the importance of the centralised nurse education service model in supporting and training nurse educators and of clearly defining their responsibilities.

## **5.5 Outcomes of this Research**

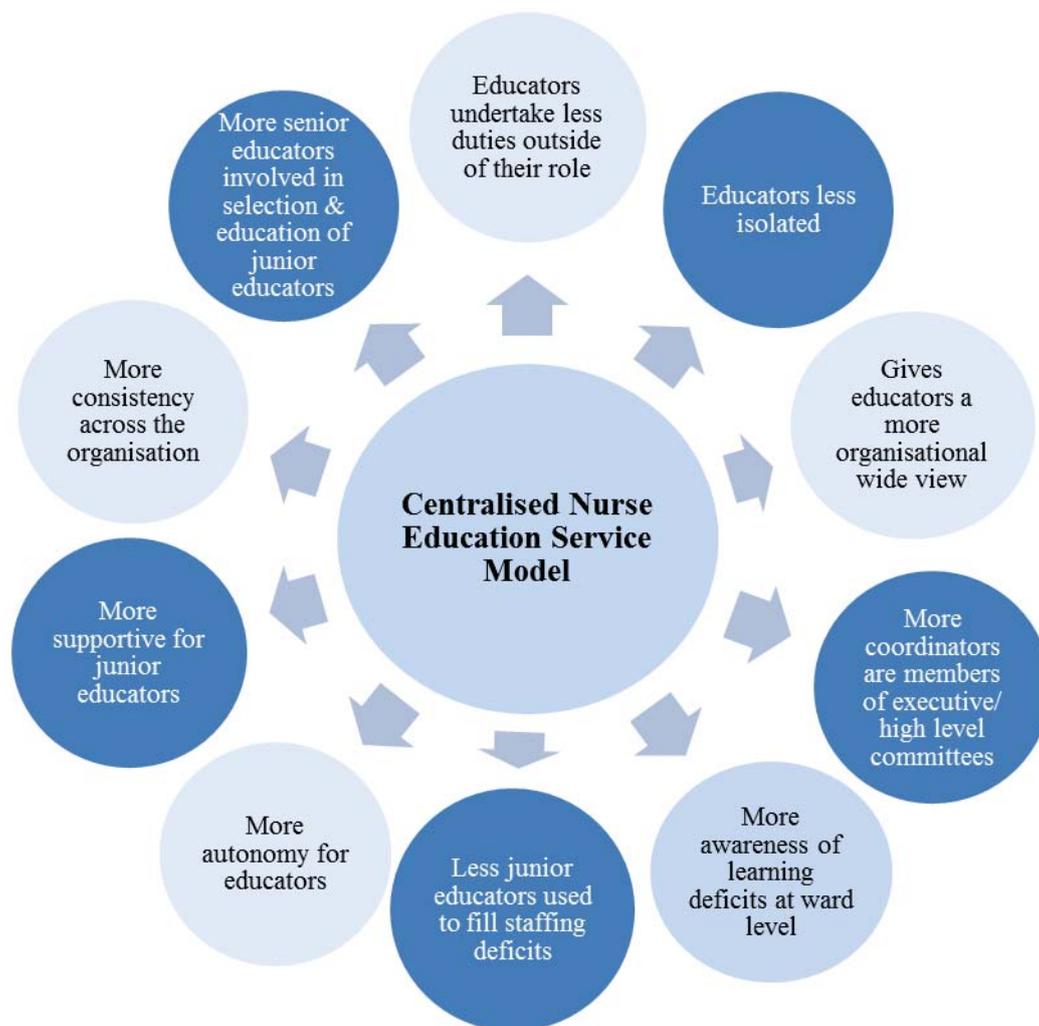
The outcomes of this research study are important as this is the first study that has been undertaken in Australia investigating nurse education service models within healthcare organisations. This study highlighted that nurse educators identified the most important aspects of an ideal nurse education service model as including having a service closely aligned with clinical practice (98.5%, n=387), clear nurse educator role definition (98%, n=385), close links with nurse unit managers (97.7%, n=384), being well resourced (97.5%, n=383) and having a training framework for education service delivery (97.5%, n=383). The study also identified that nurse educators' highest priorities for the future of nurse education were working towards set education quality standards (92.9%, n=365), increased use of technology (92.8%, n=365), more flexible teaching modalities (92.6%, n=364) and strong evidence of education outcomes (92.3%, n=363).

The study findings indicate that the majority of nurse educators in Australia are working within a combination service model (57%, n=225), with 32% (n=125) working within a centralised service model and 4% (n=14) working in a decentralised service model. The findings demonstrated that a centralised nurse education service model undertook more functions than the other models, including supporting formal training programs (e.g., postgraduate courses) (94%, n=118), coordinating the graduate nurse program (91%, n=114), coordinating student nurse placements (89%, n=111), supporting service redesign (87%, n=109) and mentoring staff undertaking new roles (87%, n=195).

In comparing the characteristics of the different nurse education service models, this study found that the type of model in use did not appear to significantly affect the educators' visibility in clinical areas or the development of specialist knowledge and skills. However, it was clear that the majority of responses showed significant results, which indicated that a centralised model was preferred. This is because it:

- Has more senior educators involved in the selection and education of junior educators.
- Requires educators to undertake less duties outside their role.
- Gives educators a more organisational-wide view.
- Makes educators feel less isolated.
- Allows for more continuous awareness of learning deficits at ward level.
- Uses less junior educators to fill staffing deficits.
- Allows more autonomy.
- Is more supportive of junior educators by senior educators.
- Supports more consistency of training across the organisation.
- Has more coordinators as members of the executive/high-level committees.

In this study, no weaknesses of a centralised nurse education service model were identified when comparing it against the decentralised and combination model (see Figure 5.9).



**Figure 5.9. Advantages of a Centralised Nurse Education Service Model**

These findings recommend that when executive teams within healthcare organisations are deciding on a model to use to deliver their nurse education service they consider implementing a centralised service model to take advantage of the benefits of this model over a decentralised or combination model. The findings of this study also indicate that nurse education services currently using a combination or decentralised service model should consider converting their model to a centralised model. One way to achieve this would be to move the reporting lines of all nurse educators within the organisation to report to either senior nurse educators or the coordinator of the education service.

By moving the reporting lines for all nurse educators within an organisation to report to the one centralised education service, the nurse education service model will change

from a combination or decentralised model into a centralised nurse education service model, bringing the advantages identified by this study.

## **5.6 Limitations of this Research**

1. The main limitation of this study is that it only investigated nurse education service models in acute care metropolitan hospitals across Australia. Hospitals included were classified as ‘acute care’ and ‘metropolitan’ using the following inclusion criteria:

- Adult general hospital
- Offer a 24-hour service
- Public and private hospitals
- Have an emergency department and intensive care unit or high dependency unit
- In a capital city or a location with a population of greater than 100,000.

By only including acute care metropolitan hospitals, the findings of this study may not be generalisable to specialist hospitals, non-acute hospitals or those in rural or remote areas.

2. The researcher also acknowledges that the response rate of the survey was low at 26% (n=393), which may have allowed for the potential of non-response bias. As only 393 nurse educators submitted completed surveys from a sample of 1500, there is the possibility that respondents’ answers might differ from the potential answers of those who did not respond, which can lead to distortion of the data and influence the results (Check & Shutt, 2012). This possibility was minimised by using the results of phases one and two to verify the findings in phase three and by calculating Chi-Square cross-tabulations on the demographic information of the 67 participants who only partially completed the survey compared to the 393 who completed the survey to identify any significant differences.

3. The researcher recognises that some interpretation of the terminology used in the survey during phase three may have varied if it was terminology not commonly used across the different Australian states and territories. Example of this may be in the description of the different nurse educator levels in Question 6 of the survey and in the statements under questions nine to 13, as they were generated from phases one and two, which were undertaken in W.A. To minimise the possibility of this, definitions were provided in the preamble and an option of 'other' was included for the survey questions.
4. Finally, the researcher is aware that this study focussed on investigating the views of nurse educators and did not examine the views of other healthcare stakeholders, such as nurses delivering direct patient care, nurse unit managers or nurse directors. This is suggested as an area for further research (see Section 6.5.1).

Overall, the methodological approach of this study was made more sound by the sequential mixed methods design, which allowed for triangulation and the verification of the findings as the study moved through the different phases. The scope of this study, included coordinators, senior and junior nurse educators in public and private hospitals of differing sizes across all states and territories in Australia, allows the findings to be generalisable across different organisations.

## **5.7 Summary**

Chapter 5 provided a comparison of the findings from the qualitative phases of the study (phases one and two) with the findings from the quantitative phase of the study (phase three). The findings of this study were then compared with those from the literature as well as against relevant theories. The findings have answered the research questions of this study, which were aimed at discovering which nurse education service models were in use across Australia, what influenced those models, nurse educators' views on their service models and the future priorities for nurse education within healthcare organisations.

This study has provided findings that add to the current knowledge around nurse education service models and nurse educators' priorities regarding the future of nurse education services. These findings may assist hospital executive teams or coordinators of nurse education services when developing their nurse education service and deciding which nurse education service model to implement. The implications of these findings and recommendations for future practice are discussed in Chapter 6.