# Teaching the ESL Nursing Student: The Relationship Between Nurse Educator Background Attributes, Beliefs Concerning the ESL Nursing Student and Instructional Strategies Used by Nurse Educators

by

Bonnie L. Fuller

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Christa de Kleine, PhD

Joanna M. Basuray, PhD, RN, CTN

Katharine C. Cook, PhD, RN, CNE

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#### Abstract

As the U.S. population quickly moves toward linguistic diversity, it is essential that sufficient numbers of linguistically diverse nurses be available to provide care, and nurse educators play a significant role in the preparation of these nurses. Little information was found in the literature about factors that influence the practices of the nurse educator related to teaching the nursing student who has English as a second language (ESL). The purpose of this research study was to investigate the factors related to teaching ESL nursing students from the perspective of the nurse educator. A pilot study was conducted to validate the researcher developed survey tool that investigated the relationship between nurse educator background attributes, beliefs concerning the ESL nursing student, and instructional strategies used when teaching the ESL nursing student. Subsequently, a national survey was conducted using the Nurse Educator Attributes, Beliefs, and Instructional Strategies (NEABIS) tool. Survey respondents (n=453) were evenly distributed in nursing schools from each of the four geographical regions of the United States. Data from the survey were analyzed using descriptive and inferential statistics. The findings from this research show that many instructional strategies identified in the nursing literature concerning teaching the ESL nursing student are not being employed by nurse educators. Additionally, statistically significant relationships were found between the nurse educator background attributes and both nurse educator beliefs and use of recommended instructional strategies. This research identified a great need for nurse educators to have specific training to teach the ESL nursing student and supports the imperative that nurse educators be afforded opportunities for cultural and linguistic experiences that broaden their understanding of the ESL nursing student.

# Dedication

# To Chris and Joey

You have grown up watching me put countless hours into this endeavor – thank you for the love shared over these last eight years.

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#### Chapter I

#### INTRODUCTION

According to the 2010 Census data, minority (non-white) individuals represent more than one-third (36%) of the U.S. population (U.S. Census Bureau, 2011); however, by 2050, it is projected that minorities will constitute nearly one-half of the U.S. population (U.S. Census Bureau, 2008). Approximately 82% of this population change will be due to immigrants and their U.S.-born descendants, and it is projected that in 2050, nearly one in five residents (19%) of the population in the United States will be foreign born (Passel & Cohn, 2008). These demographic changes bring not only major cultural and ethnic change to the United States, but also linguistic diversity (Shrestha, 2006). The most recent data from the U.S. Census Bureau American Community Survey showed that nearly 20% of the U.S. population speaks a language other than English in the home (U.S. Census Bureau, 2009). This cultural and linguistic diversity has a great impact on all social structures, not the least of which are education and healthcare--structures that are foundational to society.

The linguistic diversity of the student population in the educational systems is rapidly changing as U.S. demographics change, and so, too, is the linguistic makeup of the patients in the healthcare system. At the crux of these two systems lie educators and healthcare providers. As the U.S. population quickly moves toward linguistic diversity, it is essential that healthcare educators are prepared to teach linguistically diverse students so that there are sufficient linguistically diverse healthcare providers entering the healthcare field to meet the demands. In this study, linguistic diversity centers on the primary language of the person. This person may be the patient, nursing student, or healthcare provider who has a language other than the dominant majority language as his or her primary language. In the United States, the dominant majority language is English.

## **Background Information**

Although cultural diversity has great impact on the interactions of healthcare providers and their patients, linguistic diversity can have an even greater impact in that effective communication between patients and healthcare providers such as nurses is essential to providing quality healthcare. There is compelling evidence that linguistically diverse patients encounter significant disparities in access to health care, increased probability of receiving unnecessary diagnostic tests, and more serious adverse outcomes from medical errors and drug complications (Institute of Medicine [IOM], 2009).

Additionally, the Office of Minority Health's National Standards on Culturally and Linguistically Appropriate Services in Health Care mandates that patients with limited

English proficiency (LEP) have equal access to healthcare in a language they understand (Office on Minority Health, 2007). Therefore, it is crucial that there be increases in the numbers of linguistically diverse healthcare providers. Because nurses constitute the largest healthcare provider group (Bureau of Labor Statistics 2009), many nurse experts believe that "a diverse nursing population can help overcome language barriers and provide culturally competent nursing care" (Gilchrist & Rector, 2007, p. 278). It is imperative to increase the pool of linguistically diverse nurses to mirror the change in the U.S. demographics and meet the demands of this rapidly rising population.

#### Statement of the Problem/Significance of the Study

For many years nursing experts have acknowledged disparities in healthcare and the education of healthcare professionals. In 1997, the American Association of Colleges of Nursing (AACN) mandated that nursing programs must provide a supportive learning environment and curriculum in which students, staff, and faculty from the entire spectrum of society are full participants in the educational process. In 1997 a handbook for nursing faculty titled *Strategies for recruitment, retention, and graduation of minority nurses in colleges of nursing* was published (Bessent, 1997); yet, more than a decade later, the cultural and linguistic diversity of the nursing workforce continues to be below the acceptable level to provide appropriate care.

According to O'Neill, Marks, and Liu, in 2002, 8% of the U.S. applicants for the national nursing licensure exam (NCLEX-RN) reported that their first language was not English. In 2004, the number of these applicants with a language other than English as

their primary language had decreased to 6%. Unfortunately, these candidates for licensure also have a 10% to 15% higher failure rate on the licensure examination than their counterparts who have English as their first language (O'Neill, Marks, & Liu, 2006). As a result, less than 10% of the U.S. registered nurse population reported fluency in a language other than English (HRSA, 2010).

Although nursing programs in the United States keep track of the racial and ethnic makeup of nursing students, there is no information about their linguistic diversity. Additionally, it is common practice to use the term "culturally and linguistically diverse" when describing the nursing student from a racially or ethnically diverse background in the nursing literature. Therefore, it is difficult to parse out accurate information about the linguistically diverse nursing student. However, as secondary schools around the nation have enrolled greater numbers of students with a language other than English as their primary language, and these students graduate and enroll in colleges and universities, it follows that the population of the linguistically diverse students enrolling in nursing programs should also increase. Anecdotal evidence in the nursing literature (Choi, 2005; Gardner, 2005a) supports that there is an increased presence of nursing students with a primary first language other than English in the nation's nursing programs. However, it is unsettling to note that there is not an increase of these students as candidates for licensure exams (O'Neill, Marks, & Liu, 2006), and the demographics of the nursing workforce are not moving toward more linguistic diversity (HRSA, 2010).

The literature includes many reports of programs aimed at increasing the diversity of the U.S. nurse population, which includes the linguistically diverse nurse (Fletcher, et al., 2003; Jeffreys, 2001; Klish, 2000; Labun, 2002; Memmer & Worth, 1991; Symes,

Tart, Travis, & Toombs, 2002; Tatem & Payne, 2000). Unfortunately, the Sullivan Commission in 2004 found that there were few models of *successful* diverse student recruitment programs or retention efforts. Even though initiatives and programs continue to be put into place to address the lack of culturally and linguistically diverse nurses and nursing students, there has been little to no result from these efforts (Brown, 2008; Caputi, Engelmann, & Stasinopoulos, 2006; Evans & Greenberg, 2006; Seago & Spetz, 2005; Symes, Tart, & Travis, 2005; Wilson, Andrews, & Leners, 2006). Indeed, there continues to be an unacceptably high attrition rate for culturally and linguistically diverse nursing students from nursing education programs (Jalili-Grenier & Chase, 1997; Gilchrist & Rector, 2007). Therefore, nurses and nursing educators need to identify what more needs to be done to alter this situation. It should be considered that the culture of nursing education needs to change and improve the way educators teach students.

There are many factors and unexplored areas of nursing education that may provide information on the failure to increase the numbers of culturally and linguistically diverse nurses. Giddens (2008) succinctly stated that, "perhaps it is time to reframe this issue by acknowledging some of the inadequacies within nursing education that may be contributing to minority student attrition" (p. 79). One avenue of unexplored territory lies in the education of the linguistically diverse nursing student. During the last 30 years, there has been a consistent flow of information in the nursing literature about educational issues surrounding these nursing students, particularly their learning challenges. The literature has also contained recommendations for teaching strategies aimed at the nurse educator who teaches this student population. However, there is a paucity of research that investigates nursing faculty beliefs about teaching linguistically diverse students or use of

recommended teaching strategies for these nursing students. Additionally, several nurse education researchers have observed that some nursing faculty members may have perspectives and biases that interfere with the ability to teach all students equally (Abriam-Yago, Yoder, & Kataoka-Yahiro 1999). Moreover, faculty bias regarding culture and language can obstruct learning and impose barriers that inhibit students' success (Amaro, Abriam-Yago, & Yoder 2006).

#### Purpose of the Study

Factors that facilitate or hinder the success of the linguistically diverse nursing student need to be considered to increase the numbers of linguistically diverse registered nurses available to provide linguistically appropriate healthcare. Simpson and Bolton (2007) reported that the federal government, foundations, and other funders have invested substantial amounts of money in special projects and programs to increase the diversity of the registered nurse pool in the United States through improving the success of diverse nursing students. Many of the retention initiatives have centered on the student and on implementing strategies to solve the student centered problem: failure to succeed in nursing education. Perhaps in the efforts to "solve the problem" there has been a failure to truly define the issues so that appropriate initiatives can be implemented. Because there have not been any significant increases in the numbers of linguistically diverse nursing students moving into the profession despite these initiatives, now is the time to investigate the nurse educator role in teaching these students.

Many years of interactions with nursing educators and linguistically diverse nursing students have provided this researcher with a solid foundation of anecdotal evidence about the gap between what linguistically diverse nursing students need and what nurse educators provide. A thorough exploration of the literature expounded and supported this researcher's belief that many nurse educators are very frustrated teaching these nursing students. More than 15 years ago, Keane (1993) reported that "nursing faculty must develop and implement educational strategies to increase retention of culturally and linguistically diverse students, to improve academic achievement and to enhance success rates on the licensing exam" (p. 214). Just a few years ago, Davidhizar and Shearer (2005) proclaimed that "no longer can faculty expect students to adapt to traditional teaching strategies. Rather it is becoming increasingly evident that the faculty must assume the responsibility of adapting to the needs of the student to help the student succeed" (p. 356). There is a persistent call in the literature for faculty to adapt to the learning needs of the linguistically diverse nursing student and implement appropriate teaching strategies (Amaro, Abriam-Yago, & Yoder, 2006; Sanner & Wilson, 2008; Wang, Singh, Bird, & Ives, 2008; Starr, 2009).

Because of the language challenges of the linguistically diverse nursing student and the lack of understanding about how to teach linguistically diverse nursing students, a "perfect storm" has developed that contains complex issues contributing to the lack of a sufficient number of linguistically diverse nursing graduates and Registered Nurses (RN's). The first component of this multidimensional problem is the nursing student. The linguistically diverse nursing student may be an international nursing student, an immigrant nursing student, or even a Generation 1.5 nursing student who uses a language

other than English as his or her primary language. Although each of these nursing students has unique characteristics that will be described later in chapter two, they all have the challenges of being an English Language Learner (ELL), using English for Academic Purposes (EAP), and learning the unique language of nursing. Although there are many more components, such as culture and resources that may add to the challenges of these nursing students, the issue of language is the component that most affects this "perfect storm" from the student perspective.

Evidence of this complex issue can be found not only in the continual high attrition rates for culturally and linguistically diverse nursing students from nursing education programs (Jalili-Grenier & Chase, 1997; Gilchrist & Rector, 2007), but also in the high failure rates for these nursing graduates on the NCLEX-RN exam. O'Neill, Marks, and Liu (2006) reported that U.S.-educated nurse graduates who have English as an additional language to their native first language have a 10% to 15% higher failure rate on the NCLEX-RN exam when compared with nurse graduates who have English as their first language. To dispel the common belief that the exam is biased, the National Council of State Boards of Nursing (NCSBN) conducted a rigorous evaluation of this national exam. The findings of the evaluation showed that there was not any significant exam bias, which led to the conclusion that perhaps "the lack of English proficiency may be an impediment to acquiring nursing knowledge and skills in US nursing programs" (O'Neill, Marks, & Liu, p. 17). Not only do these nursing students have insufficient English language skills to acquire the necessary knowledge to pass the NCLEX-RN licensure examination, but it may also be that nurse educators are not using recommended teaching strategies that would support these students' acquisition of the required nursing knowledge.

The nurse educator faculty is the other large component of this "perfect storm." The ever-present nursing faculty shortage has required that nurse educators provide services to an increasing number of students, which leaves little time to provide students with unique needs the attention required to facilitate their success. Additionally, nursing faculty are first educated to be nurses – not teachers. Many of the current nursing faculty, whose average age is older than 50 years (LaRocco, 2006), have little graduate education preparation as educators prior to entering the educational venue (Oermann & Jamison, 1989; Zungolo, 2004; Bartles, 2007). Therefore, many nurse educators are teaching nursing students based on how they were taught – and the nursing student of today and nursing education are significantly different from nursing students and nursing education in years past. Lastly, the educational preparation that nurse educators received may not have included coursework in teaching linguistically diverse nursing students. Although most nurse educators participate in continuing education activities, and new graduate education programs have been developed that better prepare nurse educators for work in the field today (AACN, 2006), there remains a significant lack of educational preparation to help nursing faculty with the unique needs of the linguistically diverse nursing student. Nurse educators of today struggle with the multitude of demands of teaching and verbalize their feelings of inadequacy when faced with a classroom that contains linguistically diverse nursing students (Caputi, Engelmann, & Stasinopoulos, 2006; Carter & Xu, 2007). The nurse faculty component of the "perfect storm" lies in the complexity of teaching the linguistically diverse nursing student.

Clearly, it is time to take a critical look at the role of the nurse educator in the success of the linguistically diverse nursing student. The literature review shows that there is a large body of work by nursing researchers and educators about the learning needs of the diverse nursing student, which includes the linguistically diverse student, and recommendations for meeting those learning needs that date back as far as 1981; however, the Sullivan Commission (2004) showed that there have been few successful recruitment and retention programs for the diverse nursing student (of which the linguistically diverse nursing student is a member). Additionally, the literature review shows that there is sound research and evidence in the educational field that provides information on the successful teaching practices of secondary teachers of linguistically diverse students, which can be applied to the nursing student. What is missing, however, is an evaluation of what nurse educators understand about teaching the linguistically diverse nursing student and what type of teaching practices the nurse educator uses, if any, to facilitate the success of the linguistically diverse nursing student. Moreover, no evidence was discovered in the literature concerning what nurse educators believe about the learning needs of the linguistically diverse nursing student or about what factors may contribute to these beliefs. Therefore, the purpose of this research is to investigate the nurse educator's background educational experiences, beliefs related to teaching linguistically diverse nursing students, and the educational practices these nurse educators implement to develop a better understanding of the factors that may be impacting the lack of linguistically diverse nurses required to meet the nation's healthcare needs.

#### **Research Questions**

This research addresses the following questions:

- 1. What instructional strategies do nurse educators use when teaching linguistically diverse nursing students?
- 2. What beliefs do nurse educators hold about linguistically diverse nursing students?
- 3. What is the relationship between the beliefs that nurse educators hold about linguistically diverse nursing students and the instructional strategies the nurse educators report using when teaching linguistically diverse nursing students?
- 4. What is the relationship between nurse educators' background attributes and the beliefs they hold about linguistically diverse nursing students?
- 5. What is the relationship between nurse educators' background attributes and the instructional strategies they use when teaching linguistically diverse nursing students?

#### **Definition of Terms**

1) Background attributes – factors in a nurse educator's personal and educational experiences that may have contributed to his or her understanding of or beliefs about the linguistically diverse nursing student. These factors include level of education, informal or formal instruction for teaching linguistically diverse nursing students, life experiences with diverse populations, experience with other languages, and the number of years a nurse educator has taught.

- Beliefs understandings or perceptions about an object or person related to the qualities, attributes, or characteristics of that object or person (Fishbein & Ajzen, 1972).
- 3) Instructional strategies teaching practices that nurse educators employ when interacting with students in the educational environment. These strategies are not exclusive to teaching in the classroom learning environment, but also include strategies nurse educators use such as personal interactions with students face to face or electronically, advising, tutoring, mentoring, or formal or informal interactions outside of the classroom environment in meetings or groups.
- 4) Linguistically diverse diversity that relates to the person who does not have the dominant majority language as his or her primary first language. In the United States, and in the literature, many terms and acronyms have been used to identify this person or to identify language instruction used with persons who do not have English as their first language. These include acronyms such as ELL (English Language Learner), ESOL (English for Speakers of Other Languages), LEP (Limited English Proficiency), and EAL (English as an Additional Language). For purposes of clarity and ease of flow, the term ESL (English as a Second Language), which is the most common acronym found in the nursing literature, will be used henceforth in this research as an overarching term to describe the linguistically diverse nursing student who did not grow up with English as a primary language or does not have English as his or her primary language.
- 5) Nurse educator an instructor, teacher, or professor of nursing who teaches full time in a nursing program.

6) Nursing student – a student who is enrolled in an academic program of nursing that qualifies the student to be eligible to take the registered nurse national licensure examination (NCLEX-RN) upon graduation from the program.

#### **Delimitations/Limitations**

While some of the nurse educators in this study may also teach in a practical nursing or a graduate nursing program, the qualifying attribute is their full-time status as nurse educators who teach in a nursing education program that leads to the graduate nurse being eligible to take the national licensure examination to become a registered nurse (NCLEX-RN). A comprehensive list of nurse educators in the United States was not available; the pool of nurse educators eligible for selection into the study participant pool was limited by the nursing program having a school website that listed the nurse educator as a faculty member. The pilot survey that was sent to a limited, self-selected population of nurse educators established the initial validity of the researcher-developed survey tool; the subsequent national survey was sent to a randomly selected pool of nurse educators who self-selected to respond (return rate of 22%) or not participate in the survey (nonresponse rate of 88%). The nurse educators' educational preparation and experiences with teaching ESL nursing students may be extensive, limited, or nonexistent, and the respondents' selections of answers for the survey depend on the nurse educator's personal experiences.

#### Summary and Organization of the Study

The first chapter in this research dissertation has provided an overview of the study, including background information that supports the significance of the research: the profession of nursing needs to expand and become more linguistically diverse to meet the needs of the nation's population. The research questions address what nurse educators understand and believe about linguistically diverse (ESL) nursing students, what background attributes influenced those beliefs, and what teaching practices nurse educators report that they use when providing instruction to ESL nursing students.

Definition of terms and limitations/delimitations have also been included in chapter one.

An extensive review of the literature is included in chapter two that explores the themes of:

- caring in nursing education;
- ESL nursing student voice;
- nurse educator perspective on teaching ESL nursing students;
- recommendations for teaching the ESL nursing student;
- caring in general education;
- second-language acquisition;
- teaching ESL in grades K-12;
- categories of ESL college students;
- college ESL instruction;
- ESL college student voice;
- college educator perspective; and

• teacher beliefs, background attributes, and instructional strategies

Chapter three contains the research methodology, including development of the survey tool questions, pilot study, refinement of the survey tool, implementation of the national survey with the validated tool, and data analysis procedures. Chapter four describes the results of the national survey and includes a description of the sample population (n=426) and data analysis that answers the five research questions using descriptive and inferential statistics. Finally, chapter five contains conclusions and recommendations for nursing education that can be drawn from the analysis. Future directions in research based on this research study conclude chapter five.

# Chapter II

#### LITERATURE REVIEW

#### Methodology

During the last several years as a nurse educator who works with nursing students from diverse backgrounds and as a graduate student, this researcher has been reading, researching, and collecting books and articles related to the topic of nursing education for the culturally and linguistically diverse nursing student. This collection was used as a foundation to build the literature search in the databases MEDLINE, CINHAL, PROQUEST, and Health Source: NURSING/ACADEMIC. A forward search was developed to identify works that referred to works written by authors from the literature collection. Additionally, this researcher conducted regular searches of the nursing literature with various combinations of search terms that included nursing students, success, barriers, retention, attrition, faculty, culture, diversity, ESL, education, ethnic, nursing programs, minority, perceptions, beliefs, and strategies. The literature search

was then expanded into the general education literature to uncover more information about the research and educational practices pertaining to ESL students in secondary and higher education. Lastly, the theoretical and conceptual models related to applied linguistics, ESL education, cultural diversity, and caring in general and in nursing education were explored.

#### **Nursing Literature**

The issues surrounding teaching culturally and linguistically diverse nursing students are multiple and complex; however, there are some commonalities and themes that apply to this research study. Student perspectives, faculty perspectives, and recommendations for teaching the ESL nursing student were common themes found in the nursing literature. Caring as a foundational component in both teaching about cultural diversity and teaching culturally and linguistic diverse nursing students was also prominent.

#### Caring in Nursing Education

Although caring is a concept that is quite difficult to define, it has been identified as the essence and central unifying domain in nursing (Leininger, 1988; Watson, 1985). Caring is commonly defined as an interpersonal process in which behaviors such as altruism, attention, comforting, patience, sensitivity, trust, and respect are evident (Watson, 1985). Caring is a foundational component in nursing, and educators strive to teaching nursing students how to demonstrate caring for their patients. In 1990, the

National League for Nursing (NLN) initiated a curriculum revolution that called for caring to be the core value in nursing schools' curricula and challenged educators to incorporate caring into teaching practices and to create a sense of connectedness between themselves and the students (Tanner, 1990). It is important to recognize that caring is learned by experiencing caring practices; it is not "enough for Nurse Educators to say they believe in values of caring, respect for diversity, and individualized, culturally sensitive care; they must also model these values" (Kossman, 2009, p. 55). Nursing educators need not only to teach concepts of caring for culturally diverse patients, but they also must use these same concepts in their instructional approaches to culturally and linguistically diverse student populations.

Coyle-Rogers and Cramer (2005) reported that caring often starts "with the educators caring enough to recognize in the student a need for supportive assistance" and continues with "supportive guidance as one of the most prevalently used caring behaviors" (p. 164). Taking time to discuss common issues is a connecting practice that facilitates a positive learning environment. Caring nurse educators are "authentically present to students, and looking for caring moments that allow connection with their student" (Evans, 2004, p. 220). Caring is also a subjective experience bound in the cultural aspect of caring. Nurse educators need to understand how culture affects the ESL nursing students' classroom interactions.

In 1981, Leininger, in her cultural exploration of caring, proposed that caring should be examined by identifying specific culturally learned behaviors that are aimed at assisting, supporting, or enabling another person. Leininger's theory of culture care diversity and universality has evolved through a synthesis of the two concepts of culture

and caring. In this theory, caring is universally present in all cultures, but the specific manifestations and caring practices are very different. The culture care diversity and universality theory focuses on the phenomenon of care from a transcultural, social structure, worldview, language, and environmental framework (Leininger, 1988). Through the application of this theory to nursing education, the two distinct cultures of nurse educators and ESL nursing students interact, and the caring behaviors nurse educators use to support and promote ESL nursing students' success are defined. Through learning more about the culturally and linguistically diverse nursing student, the nurse educator is both enacting caring and teaching caring through his or her behaviors. McAllister and Irvine (2002) investigated faculty beliefs regarding teaching and interacting with culturally and linguistically diverse nursing students. They found that faculty who "take on the perspective of another culture and respond to another individual from that person's perspective" (p. 439) believe that this trait is necessary for developing a caring relationship with diverse nursing students. When nursing educators recognize the ESL nursing students' unique ways of responding in the classroom, they are able to incorporate supportive actions that promote an environment of caring. The promotion of this caring environment allows ESL nursing students to feel safe as they explore and learn the nuances of not only the English language, but also the nursing language.

#### ESL Nursing Student Perspective: ESL Nursing Student Voice

It was quite disturbing to find that as far back as almost 30 years ago, the problems in the educational experiences of ESL nursing students were documented (Abu-Saad & Kayser-Jones, 1981), and those experiences of students 30 years ago are still

relevant today (Rogan, San Miguel, Brown, & Kilstoff, 2006; Bosher & Bowles, 2008; Wang, Singh, Bird, & Ives, 2008; Sparks, 2010). Students reported that language difficulties were the major impediment to success in a nursing program, and these barriers were reported in all the areas of macro language skills, such as oral (speaking), written, listening, and reading issues.

Oral (speaking) language issues cause ESL students several problems. Students hesitate when speaking for fear of saying the wrong thing and getting embarrassed (Bosher & Smalkoski, 2002; Gay, Edgil, & Stullenbarger, 1993). According to Amaro, Abriam-Yago, and Yoder (2006), "communicating with peers, instructors, clinical staff, and patients was more difficult and ESL nursing students described experiencing impatience or discrimination from all of the groups" (p. 251). ESL nursing students fear that teachers make assumptions about their knowledge and abilities based on their language skills (Rogan, San Miguel, Brown, & Kilstoff, 2006; Sanner & Wilson, 2008; Shakya & Horsfall, 2000), and during the class and group discussions the lack of oral language proficiency prohibits students from engaging in the discussions (Abu-Saad & Kayser-Jones, 1981; Gay, Edgil, & Stullenbarger, 1993; Rogan, San Miguel, Brown, & Kilstoff, 2006).

Written communication is most important in nursing due to the critical information that is conveyed when documenting patient information, and ESL nursing students have continually reported difficulty with writing (Abu-Saad & Kayser-Jones, 1981, Bosher & Smalkoski, 2002; Bosher, 2010). A Chinese pediatrician who immigrated to the United States and was enrolled in a nursing program reported that "her inability to communicate ... in writing ... had created most of her problems in the

nursing curriculum" (Leki, 2003, p. 91). Wang, Singh, Bird, and Ives (2008) found that writing in English was a major barrier for ESL nursing students, with grammar and vocabulary being the major obstacles.

Receptive (listening) language problems were evident in student reports of having difficulty following teachers in lectures and class discussions (Abu-Saad & Kayser-Jones, 1981; Keane, 1993; Shakya & Horsfall, 2000; Wang, Singh, Bird, & Ives, 2008).

Students reported that they had difficulty with understanding "cultural words" (Caputi, Englmann, & Stasinopoulos, 2006, p. 110) used by the teachers, and they found it perplexing when teachers used slang, metaphors, colloquialisms, and unknown vocabulary terms while teaching (Wang, Singh, Bird, & Ives, 2008; Weitzel & Davidson-Shivers, 2004; Xu & Davidhizar, 2005).

Nursing coursework is demanding, rigorous, and requires a significant amount of complex reading, which causes great difficulty for many ESL nursing students. Students frequently reported that they had great difficulty keeping abreast with the required readings (Abu-Saad & Kayser-Jones, 1981; Wang, Singh, Bird, & Ives, 2008), and that they wasted precious study time reading everything while looking for what is relevant or important (Shakya & Horsfall, 2000; Sparks, 2010). A Vietnamese participant in the 2006 Amaro, Abriam-Yago, and Yoder study reported that "it took me longer to study and get reading done" (p. 250), which greatly impacts the ESL nursing student's required study time. Lack of reading proficiency was most harmful to the ESL nursing student during examinations. Lujan (2008) found that Mexican-American nursing students spent valuable time rereading test items, struggling with syntax, and having difficulty understanding what the question was asking. ESL nursing students also had difficulty

with the hidden information and long complex sentences in nursing exams, which caused them to read the question several times to comprehend the intent of the question (Bosher & Bowles, 2008).

ESL students consistently verbalized some basic needs that they perceived would be beneficial to their educational success, such as supplemental learning materials, language assistance, and faculty support. Time and again nursing students reported that having supplemental materials to support lecture content and assignments was crucial to understanding the content. Foreign-educated (international) nursing students said that having additional audiovisual aids during lectures provided context and support (Abu-Saad & Kayser-Jones, 1981; Rogan, San Miguel, Brown, & Kilstoff, 2006). ESL nursing students also felt that having learning activities that stimulated more than one sense, such as being allowed to tape lectures and listen later, was beneficial to their understanding of the complex nursing content (Jalili-Grenier & Chase, 1997). Having access to detailed handouts that identified key concepts and crucial vocabulary lists prior to class help ESL nursing students to prepare for class (Amaro, Abriam-Yago, & Yoder, 2006; Shakya & Horsfall, 2000).

Assistance with language was another persistent theme ESL nursing students voiced. The students did not feel that generic ESL classes were beneficial and preferred language support from the nursing discipline (Bosher & Smalkoski, 2002; Caputi, Englmann, & Stasinopoulos, 2006; Bosher, 2010; Douglas, 2010). This assistance was requested in many forms, including coaching, being allowed sufficient time to articulate their thoughts in class, and specific tutoring in nursing language (Amaro, Abriam-Yago, &Yoder, 2006; Sparks, 2010). Additional classes aimed at discussion and writing in

nursing were also felt to be useful (Caputi, Englmann, & Stasinopoulos, 2006; Wang, Singh, Bird, & Ives, 2008).

Lastly, faculty support was offered as an essential component to the ESL nursing student being able to learn (Abu-Saad & Kayser-Jones, 1981; Shakya & Horsfall, 2000; Sparks, 2010). Faculty support was described as the educator having an "open door" policy, staying after class to provide clarifications, providing encouraging remarks, and being non-threatening and approachable (Gardner, 2005b). Amaro, Abriam-Yago, and Yoder (2006) described the importance of faculty in the success of ESL nursing students: "Many participants reported that teachers had an even greater effect on their potential success than their families" (p. 253).

#### Faculty Perspective on Teaching ESL Nursing Students

Although the need for changes in practice has been recognized for years, and many recommendations on how to better accommodate the learning needs of the ESL nursing student abound, very little was found in the literature about the faculty views and perspectives related to teaching the ESL nursing student. During the last 10 years there have been just three articles that provided a glimpse of the nurse educator view. Although the three articles had a focus on the ESL nursing student, information about the nurse educator was also provided.

In 1997, Jalili-Grenier and Chase conducted a study to investigate retention of ESL nursing students and found that the majority of the nurse educators in the study (80 percent) believed they needed assistance in working with ESL students and thought that

workshops on effective instructional techniques for ESL students would be the most fruitful manner of assistance.

A 2002 qualitative study by Sanner, Wilson, and Samson explored the perceptions and experiences of international nursing students. They reported that "some nursing faculty had preconceived notions about international nursing students' ability to perform successfully in the nursing program," and "some faculty members assumed that international students were difficult to teach because their English was hard to understand" (p. 206).

Lastly, in 2007, Carter and Xu reported on a cultural competence quality enhancement process in which the stakeholders were interviewed during the assessment phase. Carter and Xu (2007) found that faculty "consistently related language as a significant barrier to ESL students in progressing through the program," and that faculty "were further challenged in devoting the time necessary to work with the ESL students" and "felt that there were few university resources available to provide referral for the ESL students" (p. 150).

### Recommendations for Teaching the ESL Nursing Student

The issues surrounding the culturally and linguistically diverse nursing students have been in the literature for almost 30 years, and for more than 20 years, there has been a persistent flow of ideas and recommendations on how to promote the success of these students. The 25 articles used in this literature review that contain specific recommendations for working with the ESL nursing student are listed in the accompanying chart (Table 2.1).

Table 2.1 Recommendations for Teaching ESL Nursing Students

SUPPORTIVE ACTIVITIES		
Connect on a personal level, get to know student, learn to pronounce name correctly	Xu, Davidhizar & Giger (2005) Caputi, Engelmann & Stasinopoulos (2006) Choi (2005) Williams & Calvillo (2002) Xu & Davidhizar (2005) Klisch (2000) Shearer (1989) Sparks, 2010	
Offer self, "open door" policy, be available, invite students to make appointments for questions	Cunningham, Stacciarini, & Towle (2004) Kurz (1993) Davidhizar & Shearer (2005) Williams & Calvillo (2002)	
Engender a caring, accepting, inclusive classroom environment	Gardner (2005b) Williams & Calvillo (2002)	
Arrange learning activities for L1 and L2 mixed, facilitate the development of student networks and study groups that have L1 and L2 students	Phillips & Hartley (1990) Memmer & Worth (1991) Malu & Figlear (2001) Klisch (2000) Kataoka-Yahiro & Abriam-Yago (1997) Flinn (2004) Cunningham, Stacciarini, & Towle (2004) Brown (2008) Kurz (1993) Davidhizar & Shearer (2005) Gardner (2005a) Pardue & Hass (2003) Wang, Singh, Bird, & Ives (2008) Yoder (2001) Shearer (1989) Sparks, 2010	
Assist students with solving system problems so they can understand and acquire learning resources	Davidhizar & Shearer (2005) Gardner (2005a) Williams & Calvillo (2002) Yoder (2001)	
Special ESL nursing orientation, study skills workshop for ESL nursing student, specific mentor/teacher/advisor for ESL students	Brown (2008) Memmer & Worth (1991) Gardner (2005) Sparks, 2010	
LANGUAGE DEVELOPMENT		
Tutoring in nursing language — advanced student mentor novice student, special ESL nursing course for language development, medical terminology course	Phillips & Hartley (1990) Klisch (2000) Guhde (2003) Cunningham, Stacciarini, & Towle (2004) Brown (2008) Malu & Figlear (1998) Gay, Edgil, & Stullenbarger, (1993) Julian & Keane (1999) Caputi, Engelmann & Stasinopoulos (2006) Rogan, Man Miguel, Brown, & Kilstoff (2006) Wang, Singh, Bird, & Ives (2008) Davidhizar & Shearer (2005) Labun (2002) Lujan (2008) Choi (2005) Hussin (2009) San Miguel, Rogan, Kilstoff, & Brown (2006)	
Discussion circles, small group work, safe environment to practice oral communication	Abriam-Yago, Yoder & Kataoka-Yahiro (1999) Malu & Figlear (2001) Caputi, Engelmann & Stasinopoulos (2006) Flinn (2004) Kurz (1993) Hussin (2009) San Miguel, Rogan, Kilstoff, & Brown (2006)	
Practice writing without grade, writing lab specific to ESL nursing students	Guhde (2003) Flinn (2004) Memmer & Worth (1991) Bosher (2010) Douglas (2010) Sparks, 2010	
Develop vocabulary, acronym, and phrase list	Phillips & Hartley (1990) Guhde (2003) Caputi, Engelmann & Stasinopoulos (2006) Pardue & Hass (2003) Malu & Figlear (1998) Lujan (2008) Hussin (2009) San Miguel, Rogan, Kilstoff, & Brown (2006) Sparks, 2010	
Bilingual dictionary	Cunningham, Stacciarini, & Towle (2004) Kurz (1993) Malu & Figlear (1998) Gay, Edgil, & Stullenbarger, (1993) Shearer (1989)	

Table 2.1 (cont.)

# TEACHING STRATEGIES

Radoka-Yahıro & Abriam-Yago (1997) Caputi, Engelmann & Stasinopoulos (2006) Davidhizar & Shearer (2005) Bosher & Bowles (2008) Shearer (1989) Hussin (2009) Bosher (2010)  Follow a consistent teaching format  Filinn (2004) Caputi, Engelmann & Stasinopoulos (2006)  Speak slowly; avoid slang, metaphors, colloquialisms  Speak slowly; avoid slang, metaphors, colloquialisms  Forvide handouts before class  Provide handouts before class  Recommend and allow students to record lectures (1997)  Lise visual aids when teaching — concept maps, graphic organizers  Provide context to teaching through stories and student experiences  Reduce complexity of language on handouts, in exams  Arrange for review sessions to identify key elements, explanations, practice taking tests  Provide guidance to understand important versus unimportant information  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Allow adequate processing and response time during discussions and provide extra time for tests  Engelmann & Stasinopoulos (2006) Nat, Davidhizar & Giger (2005) Xu, Davidhizar & Giger	D : 1 'C' 1 1' 'C' 1 1' C' 1 1	
Speak slowly; avoid slang, metaphors, colloquialisms  Xu, Davidhizar & Giger (2005) Caputi, Engelmann & Stasinopoulos (2006) Xu, Davidhizar (2005) Weitzel & Davidson-Shivers (2004) Hussin (2009) Sparks, 2010  Provide handouts before class  Recommend and allow students to record lectures  Recommend and allow students to record lectures  Phillips & Hartley (1990) Guhde (2003) Brown (2008) Kurz (1993)  Use visual aids when teaching — concept maps, graphic organizers  Phillips & Hartley (1990) Malu & Figlear (2001) Flinn (2004) Yoder (2001) Sparks, 2010  Reduce complexity of language on handouts, in exams  Reduce complexity of language on handouts, in exams  Arrange for review sessions to identify key elements, explanations, practice taking tests  Arrange for review sessions to identify key elements, explanations, practice taking tests  Provide guidance to understand important versus unimportant information  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Allow adequate processing and response time during discussions and provide extra time for tests  Biochical Stasinopoulos (2006) Pardue & Hass (2001) Caputi, Engelmann & Stasinopoulos (2005) Shearer (1989)  Recourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  Validates student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhizar	Provide specific, clear directions	Shearer (2005) Bosher & Bowles (2008) Shearer (1989) Hussin (2009) Bosher (2010)
colloquialisms  & Stasinopoulos (2006) Xu, Davidhizar (2005) Weitzel & Davidson-Shivers (2004) Hussin (2009) Sparks, 2010  Provide handouts before class  Abriam-Yago, Yoder & Kataoka-Yahiro (1999) Xu, Davidhizar & Giger (2005) Kataoka-Yahiro & Abriam-Yago (1997) Kurz (1993) Malu & Figlear (1998)  Recommend and allow students to record lectures  Use visual aids when teaching — concept maps, graphic organizers  Provide context to teaching through stories and student experiences  Reduce complexity of language on handouts, in exams  Arrange for review sessions to identify key elements, explanations, practice taking tests  Provide guidance to understand important versus unimportant information  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Allow adequate processing and response time during discussions and provide extra time for tests  Biochamber (2008) Williams & Calvillo (2002) Bosher (2003)  Recourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhiz	Follow a consistent teaching format	
Xu, Davidhizar & Giger (2005)   Kataoka-Yahiro & Abriam-Yago (1997)   Kurz (1993)   Malu & Figlear (1998)		& Stasinopoulos (2006) Xu, Davidhizar (2005) Weitzel & Davidson-Shivers (2004) Hussin (2009)
Use visual aids when teaching — concept maps, graphic organizers Provide context to teaching through stories and student experiences  Reduce complexity of language on handouts, in exams  Arrange for review sessions to identify key elements, explanations, practice taking tests  Provide guidance to understand important versus unimportant information  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Recommend supplemental experiments  Allow adequate processing and response time during discussions and provide extra time for tests subject matter in L1  Validate student understanding of subject matter  Validate student understanding of subject matter  Validate student understanding of subject matter  Phillips & Hartley (1990) Malu & Figlear (2001) Choi (2005) Sparks, 2010  Rehillips & Hartley (1990) Malu & Figlear (2003) Lujan (2008)  Provide guidance to understand important versus unimportant information  Validate student understand service matter  (2008)  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instru	Provide handouts before class	Xu, Davidhizar & Giger (2005) Kataoka-Yahiro & Abriam-Yago (1997) Kurz (1993) Malu & Figlear
graphic organizers Provide context to teaching through stories and student experiences  Reduce complexity of language on handouts, in exams  Reduce (2004) Pardue & Hass (2003) Lujan (2008)  Reduce complexity of language on handouts, in exams  Raciciarini, & Towle (2004) Cunningham, exams of subjear & Kataoka-Yahiro (1999)  Raciciarini, & Towle (2004) Pardue & Hass (2003)  Reduce complexity of language on handouts, in exams of subjear & Kataoka-Yahiro (1999)  Raciciarini, & Towle (2004) Pardue & Hass (2003)  Reduce complexity of subserved (2008)  Reduce complexity of language on handouts, in exams of subserve	Recommend and allow students to record lectures	(2008) Kurz (1993)
student experiences  Reduce complexity of language on handouts, in exams  Risch (2005) Sparks, 2010  Risch (2006) Flinn (2004) Cunningham, Stacciarini, & Towle (2004) Pardue & Hass (2003) Bosher & Bowles (2008) Shearer (1989)  Arrange for review sessions to identify key elements, explanations, practice taking tests  Provide guidance to understand important versus unimportant information  Recommend supplemental instruction (CAI, videos)  Provide frequent feedback  Allow adequate processing and response time during discussions and provide extra time for tests  Encourage students to explore and learn about supject matter in L1  Validate student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhizar & Giger (2005) Xu, Davidhizar & Giger (2005) Xu, Davidhizar & Choi (200	graphic organizers	Flinn (2004) Yoder (2001) Sparks, 2010
exams Stacciarini, & Towle (2004) Pardue & Hass (2003) Bosher & Bowles (2008) Shearer (1989)  Arrange for review sessions to identify key elements, explanations, practice taking tests Stacciarini, & Towle (2004) Caputi, Engelmann & Stasinopoulos (2006) Pardue & Hass (2003) Lujan (2008)  Provide guidance to understand important versus unimportant information Abriam-Yago, Yoder & Kataoka-Yahiro (1999) Kataoka-Yahiro & Abriam-Yago (1997) Guhde (2003)  Recommend supplemental instruction (CAI, videos) Provide frequent feedback Provide frequent feedback Brown (2008) Williams & Calvillo (2002) Bosher (2010)  Allow adequate processing and response time during discussions and provide extra time for tests Encourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  Stacciarini, & Towle (2004) Cunningham, Stacciarini, & Towle (2004) Caputi, Engelmann & Stasinopoulos (1997) Guhde (2003)  Stacciarini, & Towle (2004) Caputi, Engelmann & Stasinopoulos (2005) Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Kurz (1993) Wang, Singh, Bird, & Ives (2008) Choi (2005) Sparks, 2010  Validate student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhizar		Singh, Bird, & Ives (2008) Yoder (2001) Choi
Arrange for review sessions to identify key elements, explanations, practice taking tests Stacciarini, & Towle (2004) Caputi, Engelmann & Stasinopoulos (2006) Pardue & Hass (2003) Lujan (2008)  Provide guidance to understand important versus unimportant information Recommend supplemental instruction (CAI, videos)  Provide frequent feedback Provide frequent feedback Allow adequate processing and response time during discussions and provide extra time for tests Engelmann & Stasinopoulos (2006) Hussin (2009)  Encourage students to explore and learn about subject matter  Validate student understanding of subject matter		Stacciarini, & Towle (2004) Pardue & Hass (2003)
unimportant information  Recommend supplemental instruction (CAI, videos)  Recommend supplemental instruction (CAI, videos)  Phillips & Hartley (1990) Malu & Figlear (2001) Davidhizar & Shearer (2005) Shearer (1989)  Provide frequent feedback  Brown (2008) Williams & Calvillo (2002) Bosher (2010)  Allow adequate processing and response time during discussions and provide extra time for tests  Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Encourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhizar		Guhde (2003) Flinn (2004) Cunningham, Stacciarini, & Towle (2004) Caputi, Engelmann & Stasinopoulos (2006) Pardue & Hass (2003) Lujan
Davidhizar & Shearer (2005) Shearer (1989)  Provide frequent feedback Brown (2008) Williams & Calvillo (2002) Bosher (2010)  Allow adequate processing and response time during discussions and provide extra time for tests  Xu, Davidhizar & Giger (2005) Caputi, Engelmann & Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Encourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  Xu, Davidhizar & Giger (2005) Xu, Davidhizar		Kataoka-Yahiro & Abriam-Yago (1997) Guhde
Allow adequate processing and response time during discussions and provide extra time for tests  Encourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  (2010)  Xu, Davidhizar & Giger (2005) Caputi, Engelmann & Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Kurz (1993) Wang, Singh, Bird, & Ives (2008) Choi (2005) Sparks, 2010  Xu, Davidhizar & Giger (2005) Xu, Davidhizar	Recommend supplemental instruction (CAI, videos)	
during discussions and provide extra time for tests  & Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Encourage students to explore and learn about subject matter in L1  Validate student understanding of subject matter  & Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)  Kurz (1993) Wang, Singh, Bird, & Ives (2008) Choi (2005) Sparks, 2010  Xu, Davidhizar & Giger (2005) Xu, Davidhizar	Provide frequent feedback	
subject matter in L1Choi (2005) Sparks, 2010Validate student understanding of subject matterXu, Davidhizar & Giger (2005) Xu, Davidhizar	during discussions and provide extra time for tests	& Stasinopoulos (2006) Klisch (2000). Caputi, Engelmann & Stasinopoulos (2006) Hussin (2009)
	subject matter in L1	Choi (2005) Sparks, 2010
	Validate student understanding of subject matter	

The various recommendations were evaluated and categorized according to the following themes selected by this researcher: supportive activities, language development, and teaching strategies. These themes are described below.

Supportive activities are those activities that nursing programs and nurse educators can implement that alter the general learning environment for the ESL nursing student and center on relationships and resources. ESL nursing students reported that faculty support was important to them. Learning how to pronounce the student's name correctly demonstrates a caring attitude and interest in knowing the student and being supportive. Other ways for nurse educators to get to know the ESL nursing student and connect on a personal level are to have an "open door" policy and to invite students to make an appointment to talk about what they are learning. Being available to the ESL nursing student can be accomplished by making arrangements to be available before and after class.

In addition to building a supportive relationship with the ESL nursing student, the nurse educator can also facilitate and promote relationship building between native English-speaking nursing students and ESL nursing students. Nursing students who are comfortable with one another will choose to pair up for group work and study sessions. This typical pattern may be easy and comfortable, but it does not allow the ESL nursing students to have the opportunity to interact with native English-speaking nursing students so they can learn the nuances of the nursing language from a native English speaker. When nurse educators assign and promote mixed learning groups, both the ESL and native English-speaking nursing students benefit. The ESL and native English-speaking

nursing students share their various perspectives, and the ESL nursing student has the opportunity to learn more about English in the nursing context.

The nurse educator can support ESL nursing students by facilitating the acquisition of resources. Many ESL nursing students are unfamiliar with the complex university systems, are unaware of the resources available, and may not have the tenacity to pursue those resources. Nurse educators and nursing programs can provide written instructions on where to go and how to access the multiple resources available, or they can model how to acquire and use the resources. Additionally, nursing programs and nurse educators can facilitate the development of additional services that are beneficial to ESL nursing students, such as specialized orientation sessions aimed at the unique need of the ESL nursing student, workshops on how to study for nursing and read nursing textbooks, or identifying a teacher/advisor/mentor specifically for the ESL nursing student.

In addition to support, English language development is crucial to the ESL nursing student. Several activities identified in the nursing literature were aimed at assisting the ESL nursing student in further language development. The most common recommendation was the provision of a tutor who could not only assist in working with the student in English language development, but also in nursing language — ideally, this tutor would be a higher-level nursing student. Further oral language development could be accomplished through small group work that mixed ESL nursing students with English speakers, discussion circles, paired dialogue learning activities, or even a separate nursing language course for ESL nursing students.

Vocabulary development was noted as being crucial to ESL nursing students' language development. A medical terminology course is suggested in many nursing programs, and it was frequently recommended that this medical terminology course be a required course for ESL nursing students. Another avenue to promote language development is the use of a bilingual dictionary. It may seem evident that the use of bilingual dictionaries or translators would be beneficial; however, many ESL students may not use this resource because they do not think they need it or feel that it may set them apart. Additionally, most nursing programs do not allow the use of any resource during examinations, including translators and bilingual dictionaries. Although translators and bilingual dictionaries cannot be used on the national licensure examinations, it was recommended that they be promoted during the beginning nursing courses so ESL nursing students can build up their vocabulary and English language understanding.

Most importantly, there were multiple recommendations on how to better teach the ESL nursing student, starting with engendering a caring, accepting, and inclusive classroom environment. Many of the recommendations are simply good teaching practices that all nursing students would find beneficial (clear directions, frequent feedback) but are significant to promoting the success of the ESL nursing student. Other teaching practices were more tailored to the unique learning needs of the ESL nursing student.

Frequently, the ESL nursing student will have a different educational background and be used to a different teaching style from what is practiced in the U.S. classroom.

Trying to follow classroom activities provides challenges that add to the burden of trying to listen and understand the nursing terminology and English language used in the

classroom. Therefore, several recommendations for classroom management were made, such as following a consistent teaching format and speaking slowly and avoiding slang, metaphors, and colloquialisms. Allowing ESL nursing students sufficient processing and response time is essential not only to their comfort in the learning environment, but it is also necessary so they can adequately demonstrate their understanding of the content and subject matter. Additionally, the use of visual aids, such as graphic organizers, concept maps, and pictures, are valuable strategies that enhance student understanding. Other recommendations that may facilitate content understanding were to provide detailed handouts before class so the ESL nursing student could do pre-reading and preparation for class, provide context for the content through stories and student experiences, and encouraging students to record the class so they could listen repeatedly to the presentation.

To assist in both language development and content understanding, nurse educators should provide or facilitate the development of a vocabulary, acronym, and phrase list that is unique to the content being taught. Moreover, the complexity of the language on both handouts and exams should be reduced so the ESL nursing student can spend less time trying to understand the English language rather than focusing on understanding the content being taught or evaluated. Encouraging ESL nursing students to learn about the subject matter being taught in their primary language first to build a firm understanding of the content was also recommended.

Other teaching strategies that facilitate learning centered on instructional followup. The nurse educator can review and then recommend appropriate supplemental instruction in the form of texts, videos, or computer-aided instruction (CAI). Planning and facilitating review sessions that contain activities to help the ESL nursing student identify the important versus supplemental information, provide deeper explanations of the material, identify key elements, and validate understanding of the subject matter are useful activities that can be implemented by nurse educators, graduate assistants, or higher-level nursing student tutors.

Clearly, during the last 20 years there has been a plethora of articles and texts that have provided consistent recommendations for providing culturally and linguistically appropriate education for the ESL nursing student, including supportive activities, language development, and teaching strategies. These recommendations have been aimed at improving the retention and success of the ESL nursing student in U.S. nursing programs. Although there is information in the literature about retention and success programs aimed at the diverse nursing student in general that include the ESL nursing student (Etowa, Foster, Vukic, Wittstock, & Youden, 2005; Evans, 2007; Fletcher, et al., 2003; Gardner, 2005a; Higgins, 2004; Jeffreys, 2001; Klisch, 2000; Labun, 2002; Stewart, 2005; Symes, Tart, & Travis, 2005; Symes, Tart, Travis, & Toombs, 2002; Tatem & Payne, 2000; Valencia-Go, 2005), there is not any evidence in the literature about programs targeted specifically to the ESL nursing student. Additionally, there was not any evidence in the literature related to how much nurse educators know about these recommendations for teaching ESL nursing students, if these recommendations are being implemented, nor if they are making any difference in the success of ESL nursing students.

#### General Education Literature

The methodology used for investigating the nursing literature was also used for exploring the educational literature. It is most interesting that with these two in-depth literature reviews there was not much overlap — few educational researchers use work found in the nursing literature, and few nursing education researchers use the educational literature. One major exception is the work by Jim Cummins (1992); his language model of basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP) is evident as a theoretical foundation for several nurse education researchers. Caring in education is a prominent theme and foundational construct in general education, just as it is in nursing education; again, there is little overlap in the literature. A review of the complex issues of second language acquisition is provided to add a level of understanding to the language, learning, and teaching issues ESL nursing students and teachers face. Following is a review of the educational literature in which issues and strategies used in both the secondary and university settings with ESL students are explored. Lastly, as support for the triangulation of nurse educators' background attributes, beliefs, and instructional strategies, there is a section that explores the relationship between these factors.

## Caring in Education

Although the discipline of nursing has claimed caring as its central and unifying theme, this trait is not unique to nursing. The educational philosopher Nel Noddings has put forth that education should be grounded in caring and has proposed an alternative

educational scheme based on caring. According to Noddings, caring is a universally human characteristic, but it is also a learned social process that begins with the teacher: Students learn to care through modeling and caring practices demonstrated by teachers (Noddings, 2005). The way in which a teacher interacts with students and facilitates their interactions with one another provides a powerful message and models caring behaviors. Noddings does not espouse that caring is a defined set of behaviors; she believes that caring is a way of being in a relationship. A caring relation is in its most basic form a connection or encounter between two human beings, but within that dynamic, there are caring actions that support the caring relationship. Also within that dynamic are the roles of the one caring and the one being cared for (Noddings, 2005). In education, the teacher is commonly the one caring, and the student is the one being cared for. Most importantly, through this dynamic caring relationship and encounters, the teacher helps the student learn how to be the one caring, which is highly important in nursing education.

When nurse educators are working with ESL nursing students, Noddings' philosophy of education can help the nurse educator establish a caring environment of teaching and learning. Language learning is an ongoing process that is best supported in a caring environment. True caring allows the nurse educator to see and hear what the ESL nursing student is trying to convey. Teachers who are in the caring-for role listen and respond differentially to their students (Noddings, 2006). Caring nurse educators listen and are responsive to the needs of the ESL nursing student. This positive caring communication allows the nurse educator to gain access to the ESL nursing student not only to learn more about the student's unique needs, but also to perform an appropriate evaluation of the ESL nursing student's abilities. This caring relationship is fundamental

not only to the success of the ESL nursing student, but also to the development of caring future nurses.

Language: Second Language Acquisition

Contrary to the beliefs of many college faculty who are unfamiliar with ESL education (such as nurse educators), second language acquisition is not a decontextualized skill that is learned in the classroom (Ovando & Collier, 1998). Even though first language acquisition, unlike second language acquisition, is a seamless process that happens automatically as the language is heard and used from the time of birth; both first and second language acquisition are long-term and evolving processes. Although there are varying opinions and theories about how the first language is acquired, it is fairly universally accepted that language is a unique human quality, and oral proficiency in using the first language is developed early and easily in most humans. Acquisition of a first language is virtually always successful; however, this is not the case with second language acquisition (SLA). Second-language speakers rarely achieve levels of native-like fluency. SLA encompasses not only the learning of the grammar and vocabulary, but also acquisition of the nuances of language use (the pragmatics) that go along with becoming functional or fluent in the language. There are several models, as well as myths, about how second languages are learned (Lightbown & Spada, 2006; McLaughlin, 1992), but the common concepts included in most SLA models center on student variables, language issues, and sociocultural/environmental components (Brown, 2000; de Kleine, 2007).

The prism model developed by Thomas and Collier (as reported in Ovando & Collier, 1998) depicts the complexity and interdependence of four components that influence SLA in the school setting: sociocultural processes, language development, academic development, and cognitive development. Although developed with the K-12 student in mind, this model is applicable to the ESL college level student as well. The sociocultural processes contain the individual student variables (affective factors), as well as the external variables associated with the school environment (such as support systems). Language development factors are associated with both the first and second language abilities and include all of the macro factors involved with the inputs (listening, reading) and outputs (speaking, writing) of language. A college student who has achieved a high level of first language ability will be able to transfer those literacy skills of listening, speaking, reading and writing developed with first language acquisition to learning the second language. Academic development includes the students' ability in all the various dimensions of schoolwork (note taking, studying, test taking, etc.) and content understanding in specific subject areas (math, sciences, social studies, etc.). Again, proficiencies in these academic areas in the first language will be transferable to the second language. Lastly, cognitive development factors that influence SLA are concerned with the students' cognitive maturity —students who have reached cognitive maturity will be able to understand the nuances and pragmatics of language usage in the first language and will be able to transfer these skills to their English language learning (Ovando & Collier, 1998).

The Cummins (1992) model provides another perspective that helps conceptualize the process of second language acquisition necessary for ESL students.

Cummins divided language acquisition into two domains: basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP). Cummins describes the BICS and CALP language use along a continuum. At one end of the continuum are the BICS language abilities. This level of proficiency consists of language that relies deeply on the context of the situation or conversation for meaning. It is cognitively less demanding due to multiple information inputs. At the other end of the continuum, CALP is language usage that is context reduced and requires significant cognitive processing for acquiring meaning (Cummins, 1992). Context-reduced situations, such as lectures and textbooks, present fewer clues to the language and are more linguistically demanding.

The type of social language (BICS) that students use in face-to-face conversations is the "manifestation of language proficiency in everyday communicative contexts" (Cummins, 1992, p. 17). This BICS level of communication is cognitively undemanding (social) — everyday tasks and routines that do not require much thought. It is composed of the superficial skills of listening and speaking and depends greatly on a variety of cues, such as facial expressions, gestures, and other nonverbal types of communication. The ESL student becomes skilled in the BICS of language through interacting with other students. Unfortunately, according to Cummins (1992), students at the BICS level of language ability have considerably more difficulty understanding concepts and connections between the concepts because they have yet to develop the language skills required for the demands of the academic environment.

An important concept critical to SLA contained in the Cummins BICS/CALP framework is the "common underlying proficiency" (CUP) that "makes possible the

transfer of cognitive/academic or literacy-related skills across languages" (Cummins, 1992, p. 22). Some of these CUP skills are "subject matter knowledge, higher-order thinking skills, reading skills, [and] writing composition skills" that can be learned in one language and then transferred to another language (Cummins, 1992, p. 23). ESL students' increased comprehension of the English language comes from articulating a specific idea in their own language first. When ESL students can express a clear understanding of a concept or idea in their own language, they are more able to learn the concept and subject matter and then articulate their understanding in their second language of English (Cummins, 1992).

In addition to CUP capabilities, the language requirements for critical thinking necessary to nursing are primarily at the CALP level of academic language ability. CALP represents the ability to communicate on a more advanced level about abstract ideas and depends more on the more complex components of the language. CALP requires students to communicate in more cognitively demanding situations, such as taking notes, interpreting abstract concepts presented in textbooks, writing papers, and completing exams that require understanding of the concepts and focused thought. CALP is developed through reading academic texts and repeated exposure to academic terminology found in classroom lectures and discussions. Technical languages, such as the language used in nursing, is low context, and students who are accustomed to looking for nonverbal contextual cues to clarify meaning find nursing language difficult to understand. These academic activities that are cognitively demanding and context reduced are more challenging for the ESL student, therefore, ESL students benefit greatly from moving along the continuum from a cognitively undemanding, context-rich

environment to cognitively demanding, context-reduced tasks when learning in the nursing discipline.

Attaining language proficiency depends on many factors, especially time spent using the language. Cummins (1992) reported that students in the elementary grades acquire BICS level of language in about one to two years. However, the CALP level of language proficiency requires about four to seven years of immersion in the academic language environment (Cummins, 1992; Ovando & Collier, 1998; Thomas & Collier, 2002). Needless to say, to acquire the necessary level of academic language proficiency required for higher-level college instruction, a student needs to be immersed in the English language academic environment for several years prior to entering the discipline specific instruction of a nursing program.

One of the major problems ESL nursing students report across all languages is the feeling of being unprepared for the kind of English used in nursing. Most ESL nursing students are proficient in conversational English (i.e., BICS) — but the language needed to succeed in a highly technical science and nursing curriculum requires a higher level of academic language proficiency. It is even more difficult in the medical field because the students not only must be proficient in general English, but they also must learn medical terminology and the nursing language — almost a second language unto itself. The English language used in nursing is discipline specific and is classified as an English for Specific Purpose (ESP) with highly specialized language needs (Hussin, 2002; Orr, 2002). "These students need to learn two new languages: English and healthcare" (Starr, 2009, p. 485). Additionally, "scientific language and literacy can differ significantly from the language and literacy that students use in other classes" (Zwiers, 2008, p. 85).

Students' ability to learn the terminology is further complicated because there frequently is not a direct-word translation for many medical and nursing terms into the student's native language. This lack of direct translation for vocabulary then requires a student to utilize the CALP level of language in order to decipher meaning through further communication using listening, reading, speaking, and writing skills. Clearly, ESL students in a nursing curriculum not only are challenged with developing their English language skills, but also with developing additional discipline-specific language ability.

### Teaching ESL in K-12

There has been much research in teaching and learning related to the ESL student in grades K-12 as a result of federal mandates. A memorandum in 1970 clarified the Civil Rights Act of 1964, which prohibits discrimination and ensures equal access for all people in the United States. This memorandum dictated that when the inability to speak and understand the English language excludes children from effective participation in the educational process, the public school district is required to make accommodations. This federal law ensures equal education opportunities to students with limited English proficiency in the elementary and secondary levels (U.S. Department of Education, Office for Civil Rights, 2005). Additionally, in 1974, the Supreme Court, in findings related to the Lau v. Nichols petition, determined that Title VI (federally funded) school districts should "take affirmative steps to rectify the language deficiency of students with limited English proficiency" (Zirkel, 2002, p. 8). As a result of these legislative and judicial actions, educators were challenged to make appropriate accommodations for their ESL students. Experience and research during the last several decades suggest there are a

number of principles and strategies that can be put into place to improve the teaching and learning related to the ESL student. Professional educational organizations have risen to the occasion and have developed specialized organizations (TESOL, 2007), programs, and models specifically for teachers and teaching ESL students (Pearson, 2008). Interestingly, when evaluating the educational literature, recommendations found here were very similar to the recommendations found in the nursing literature — although, generally speaking, neither discipline references the other. Table 2.2 provides a detailed listing of the following themes in the education literature that mirror those found in the nursing literature: language development, and teaching strategies, and supportive activities.

Table 2.2 Teaching Strategies Recommended for K-12 Educators

Content / Activities

Conversation circles

Read out loud

Opportunities to practice language

Source Cartiera (2006) Coleman & Goldenberg (2010b) Develop literacy in home/native language Coleman & Goldenberg (2009) Curtain (2005) Smith (2008) Solomon, Lalas & Franklin (2006) Zwiers (2008)

Cartiera (2006) Coleman & Goldenberg (2010a) Coleman & Vocabulary building with focus on key terms Goldenberg (2010b) involved in content learning de Jong & Harper (2005) Smith (2008) Solomon, Lalas & Franklin (2006) Zwiers (2008)

**Language Development** 

## Table 2.2 (*cont.*)

Teaching Strategies		
Content / Activities	Source	
Draw on student's background knowledge,	Cartiera (2006) Coleman & Goldenberg (2010a) Coleman &	
prior experiences to build supportive	Goldenberg (2010b)	
structure	Corson (2001) de Jong & Harper (2005)	
	Durgunoglu (1997) Freeman & Freeman (2002) Garcia (1991)	
	Gibbons (2003) Hammond (2008) Smith (2008) Tellez &	
	Waxman (2005) Zwiers (2008)	
Talk slowly	Coleman & Goldenberg (2010a) Corson (2001) Curtain (2005)	
Communicate clearly	de Jong & Harper (2005) Garcia (1991) Smith (2008)	
Avoid colloquial language and	Solomon, Lalas & Franklin (2006) Wong Fillmore & Snow	
slang	(2000)	
Explicit instruction —	Coleman & Goldenberg (2009) Coleman & Goldenberg	
clear objectives, instructions;	(2010b) de Jong & Harper (2005) Smith (2008) Solomon,	
modeling; and time for practice	Lalas & Franklin (2006)	
Use of real objects, examples, visual aids,	Cartiera (2006) Coleman & Goldenberg (2010b) Commins &	
graphic organizers	Miramontes (2005) Curtain (2005) de Jong & Harper (2005)	
	Smith (2008) Solomon, Lalas & Franklin (2006) Zwiers (2008)	
Use of L1 for clarification, support of	Coleman & Goldenberg (2010b) Commins & Miramontes	
learning in L2	(2005) Garcia (1991)	
	Smith (2008) Solomon, Lalas & Franklin (2006)	
Time for processing	De Jong & Harper (2005) Smith (2008) Zwiers (2008)	
Technology and supplementary materials for	Cartiera (2006) Curtain (2005) Smith (2008)	
support	Solomon, Lalas & Franklin (2006) Tellez & Waxman (2005)	
Monitor progress through frequent	Coleman & Goldenberg (2009) Commins & Miramontes	
appropriate evaluation/assessment	(2005) de Jong & Harper (2005) Hammond (2008) Garcia	
	(1991) Gibbons (2003) Smith (2008) Solomon, Lalas &	
	Franklin (2006) Wong Fillmore & Snow (2000)	

**Supportive Activities** Content / Activities Source Create a positive, welcoming, safe learning climate Cartiera (2006) Commins & Miramontes (2005) that fosters a sense of belonging Curtain (2005) de Jong & Harper (2005) Garcia (1991) Lou (1994) Smith (2008) Cummins (2001) Offer self and opportunities for personal interactions Develop caring relationship with student through Zwiers (2008) getting know the student on a personal level Purposefully organize students for collaboration with Cartiera (2006) Coleman & Goldenberg (2009) native English speakers Commins & Miramontes (2005) Organize cooperative learning activities/groups Curtain (2005) Freeman & Freeman (2002) Arrange peer-to-peer interaction de Jong & Harper (2005) Garcia (1991) Smith (2008) Solomon, Lalas & Franklin (2006) Tellez & Waxman (2005) Zwiers (2008)

Unique to the education discipline are educational models based on the principles of specially designed academic instruction in English (SDAIE) and content based instruction (CBI) that have incorporated many of these recommendations. These models promote teaching strategies that facilitate ESL students learning content while also developing their English language ability. Both SDAIE and CBI are methods of teaching ESL students in English in such a manner that they gain skills in both the subject material and in using English through carefully designed lessons and use of supportive materials in their primary language (Kaufman & Crandall, 2005; Hansen-Thomas, 2008). Within this framework, content teachers can address the language issues that accompany the ESL student so effective teaching can occur.

The Sheltered Instruction Observation Protocol (SIOP) is an educational model specific for teaching ESL students that was developed and refined through research and field testing during the last 10 years (Echevarría, Vogt, & Short, 2008). The SIOP approach is based in the SDAIE and CBI principles and is a framework for organizing teaching that facilitates implementation of effective language-based practices in the classroom. The SIOP model contains supportive activities, language development, and teaching strategies found in the educational literature. These recommended best practices are incorporated into eight components listed below (Echevarría, Vogt, & Short, 2008):

1. *Preparation*: Teachers define content and language objectives for the students, select appropriate content and supplementary materials to make the lesson clear, adapt content to the students' language proficiency level, and use meaningful activities to integrate language and content.

- 2. *Building background*: Teachers link concepts to the students' background experiences through explicit connections with content and key vocabulary.
- 3. *Comprehensible input*: Teachers use techniques that facilitate student understanding, such as appropriate speech for proficiency level, clear explanations of tasks to be accomplished, and a variety of teaching methods to make content clear.
- 4. *Strategies*: Teachers use and teach strategies to students for understanding content, such as scaffolding and questioning.
- 5. *Interaction*: Teachers give multiple opportunities for frequent interactions with both the teacher and other students through groupings, and they provide sufficient wait time for student responses and ample opportunities for students to clarify key concepts in their first language.
- 6. *Practice/application*: Teachers develop lessons and provide materials that allow the students to manipulate and explore material and apply content through use of all four language skills.
- 7. Lesson delivery: Teachers ensure that lessons have the desired effect by making sure that students are fully engaged in the learning activities, setting the pace for the learning activity according to the students language proficiency level, and using the content and language objectives throughout teaching.
- 8. Lesson review/assessment: Teachers provide a comprehensive review of content, concepts, and key vocabulary; give regular and frequent feedback to students; and conduct ongoing assessment of student comprehension of lessons and achievement of objectives.

## College ESL Instruction

The majority of research with ESL students has been focused on the K-12 classroom, as should be expected because there are legal requirements and mandates for providing equal access to a basic education for these students. However, as this nation continues on the path toward cultural and linguistic diversity being the norm rather than the exception, there is also an increase in the infusion of ESL students into college classrooms. These ESL students have many varied learning experiences that come with being international students, recent immigrants, or Generation 1.5 students. In the college setting, there are not any legal mandates to provide instruction in a language that the student understands. Therefore, the ESL college student frequently suffers from the benign neglect of mainstreaming. The common thread between these categories of ESL college students is the academic language challenges they face. To better understand the challenges of teaching the ESL student, the unique qualities and differences among these types of ESL college students need to be explored.

### **International Students**

International students are those ESL students who are in the United States specifically for their university education. These students frequently have a solid academic background in their first language and have learned English as a foreign language in their home country, but they may not have the fluency required for the U.S. college classroom (di Gennaro, 2008). It is recognized that all nurses should have an adequate command of the English language as a basis for communication in the profession. As evidence, the National Council of State Boards of Nursing (NCSBN)

recommends that the English proficiency of international nurses needs to be adequate to perform entry-level nursing safely and effectively. To this end, a Test of English as a Foreign Language – Internet Based Test (TOEFL-iBT)) total passing score of 84 out of 120 is required for international nurses who have been educated outside of the United States and who are applying to take the NCLEX exams for U.S. licensure (Wendt & Woo, 2009). A total TOEFL-iBT score of 84 is in the intermediate range for English language ability (Educational Testing Service, 2007, University Language Services, n.d.).

It is of great interest, however, that the TOFEL-iBT requirement of 84 for international nurses who received their nursing education outside of the United States and who are seeking licensure in this country is a higher requirement than what many U.S. universities require for international student admission. For example, Howard Community College in Maryland requires a total score of 75, but Arizona State University only requires a total score of 61 for its pre-professional undergraduate admission. The majority of universities reporting their admission requirements for TOEFL-iBT have scores that range from 52 to 80 (Educational Testing Service, 2009). A significant finding is that the common score of 61 in this range of TOEFL-iBT scores falls in a category with descriptions such as "low," "limited," "weak," or "fair," according to the University Language Services (n.d.). The TOEFL-iBT standard for college admissions is a gatekeeper and means to evaluate the English language proficiency of the international ESL student — albeit a fairly low one. Sanner, Wilson, and Samson (2002) reported that "although they were required to earn scores on the Test of English as a Foreign Language at or above a level believed to be adequate for them to understand lectures and do their assignments, many international students reported

English to be a problem for them" (p. 207). Clearly, TOFEL scores are adequate for conversation and non-discipline specific readings, but they do not demonstrate that the ESL student is proficient in academic language understanding. Higher levels of proficiency are required to successfully grapple with the verbal and written academic demands of nursing coursework. Thus, there are international students in U.S. nursing programs with inadequate English language ability required for the rigorous academics of nursing.

## **Recent Immigrants**

Recent immigrants are persons born abroad who have recently settled in the U.S as permanent residents (U.S. Census Bureau, n.d., b). These ESL students have received the majority of their pre-college education outside of the United States, and they may be political or economic refugees from their home countries who may also have inadequate academic backgrounds for success in the U.S. school system (Freeman & Freeman, 2002). Additionally, recent immigrant students in U.S. colleges are not required to have their English language ability evaluated for admission (di Gennaro, 2008); therefore, there is not even the gatekeeper TOEFL iBT testing as a means to evaluate the English language proficiency of these recent immigrant students as there is with the international student. As a result, many recent immigrant ESL students who have limited English proficiency, struggle to meet the demands of the college classroom, and do not have adequate support to improve their English language proficiency

#### Generation 1.5 students

The more recent category of ESL students is the burgeoning "Generation 1.5" students, who have received the majority of their education in U.S. schools but who have a language other than English as their primary home and community language. It is frequently assumed that the Generation 1.5 students who can speak English well enough to be accepted into the college classroom are also able to handle the rigors of the classroom demands, just as native speakers of English can. However, it is important to remember that it is not the number of years in the United States, but rather use of the language that allows for language development. Despite having received a U.S. Englishbased education, Generation 1.5 students have not acquired the academic language skills required for success in college (De Lima, 2003; di Gennaro, 2008; Harklau, 2003). They, like many of the recent immigrant English language learners in the classroom, have basic interpersonal communication skills (i.e., BICS) that have allowed them to navigate through the system, but they often do not have the required academic level of language understanding (i.e., CALP) needed for college-level coursework. According to Harklau (2003),

There is great diversity among them [generation 1.5 students] in terms of their prior educational experience, native and English language proficiency, language dominance, and academic literacy. ... They may see themselves as bilingual, but English may be the only language in which they have academic preparation or in which they can read and write. At the same time, these students may not feel that they have a full command of English, having grown up speaking another language at home or in their community. Equipped with social skills in English, generation 1.5 students often appear in conversation to be native English speakers. However, they are usually less skilled in the academic language associated with school achievement, especially in the area of writing. ... One of the most common traits among generation 1.5 students is limited or no literacy in the first language. ... Unlike international students,

generation 1.5 students lack a basis of comparison in fully developed oral, written, or both systems of a first language (p.2).

The same as recent immigrants, Generation 1.5 students in U.S. colleges are not required to have their English language ability evaluated for admission to college (di Gennaro, 2008). As a result, the level of English language proficiency of this category of ESL students is also undocumented and generally unknown. Although it is assumed by many educators that students who have received their secondary education in the United States and have continued on to college have adequate English language skills for academic coursework, this may be a mistaken assumption. These ESL nursing students and educators may not initially recognize that there are language problems because the conversational grasp of English by the Generation 1.5 student has served them well thus far.

Each of these categories of ESL college students has academic language challenges, and there may be a wide gap between the language ability required for success in a rigorous nursing curriculum and the ability of some ESL students. In the development of a English-as-a-Second Language Program for ESL nursing students, Brown (2008) found that "although most of the students reported that they had been speaking English on a daily basis for a number of years, they said their style of spoken and written dialect of English differs from the nursing program's language style" (p. 187). Clearly, many ESL nursing students, whether an international, recent immigrant or a Generation 1.5 student are challenged by the language discourse and rigor of the nursing curriculum.

College ESL students may differ not only in linguistic proficiency, but also in attitudes toward language and learning styles based on their previous learning experiences. It is not uncommon for ESL students to attribute difficulties with academic courses to their mastery level of English. However, Kutz (2004) believes that the student is not only having a language problem, but also a discourse learning problem because much of what is talked about in the classroom is discipline- and course-specific language that is not commonly used elsewhere such as in the home, community, or even other classroom settings. For instance, the science classroom will have content and discipline specific vocabulary that will be significantly different from the math classroom or nursing classroom. Additionally, each discipline will have unique ways of speaking and using the vocabulary and ways of teaching and learning in the classroom. As a result, Zamel reported that students requested "clearer and more explicitly detailed assignments and more accessible classroom talk" (2004, p. 8) to understand the classroom discourse and discipline content.

## ESL College Student Voice

The voice of the ESL college student provides another perspective in understanding of the issues and challenges that face ESL students from all disciplines, including nursing. These students have verbalized their difficulties in the college setting that include:

 fear of asking for help from their teachers due to perceived inability to articulate needs well

- fear of asking for assistance from peers for fear of being made fun of and being caused embarrassment
- difficulty with oral communication that prohibited them from engaging in classroom discussions and group activities
- difficulty with writing academic papers and examinations
- fear that their linguistic and cultural differences mask their intelligence and knowledge. (Chen & Fox, 2008; Srikanth, 2004; Zamel & Spack, 2006).

These factors help to explain the complex issues that impact the ESL student in the college classroom. It is unfortunate that these factors may contribute to many college ESL students never managing to achieve the level of English competency necessary to attain the degree that they seek (Leki & Carson, 1997).

## College Educator Perspective

The responses of teachers in the K-12 and college classrooms to teaching culturally and linguistically diverse students are varied. Teachers have reported that they need to evaluate their own background and beliefs and learn more about how to teach the ESL student (Lou, 1994). However, they have also reported that they believe students should adapt to the rigors of the U.S. college classroom (McCargar, 1993). Despite the mandates and myriad of resources developed during the last two decades, secondary classroom teachers continue to report that they feel ESL students bring down the overall learning level of the classroom (Gunderson, 2008).

The majority (80%) of the faculty members in the nation's colleges and universities are from a white, English-speaking, U.S. educated background (Forrest Cataldi, Fahimi, & Bradburn, 2005) and may have limited experience with the increasing numbers of multicultural and multilingual learners who have been entering colleges and universities. Faculty come to the college classroom with knowledge and skills that may be inadequate for teaching the ESL student and are often underprepared to meet the unique needs of these students. Teaching the ESL student is not a straightforward process. As with the nursing literature, college professors in general have beliefs that mirror nurse educator beliefs: ESL students are both a gift due to the unique and varied experiences that they bring to the classroom and a challenge as a result of the barriers related to the communication problems that impair the students' ability to share these experiences fully (Zamel & Spack, 2004; Song, 2006; Henderson, 2009).

The work by Zamel and Spack in their text "Crossing the Curriculum: Multilingual Learners in College Classrooms" (2004), provided perspectives from college professors from a myriad of disciplines that described positive pedagogical practices used in classrooms with the ESL student. The stories these professors tell reinforce the importance that pedagogy has in the ESL student's learning experience. In her research, Zamel reported that ESL students "spoke of patience, tolerance, and encouragement as key factors that affected their learning" (2004, p. 8). Another professor, Peter Kiang (2004, p. 209), described creating a more inclusive learning environment by assigning students to share stories in class about both the meaning and pronunciation or their names. Through this activity, students learn to recognize and refer to one another in more connected ways that break down the social distance between the students and teacher in

the classroom. This open and welcoming classroom is perpetuated by "voicing names and naming voices" and has a "transformative pedagogical power" (p. 218) that builds the bridges that allow the students to appreciate and support one another in learning.

Zamel and Spack (2006) advocated for faculty to create time for students to write down responses to rehearse their thinking, rather than calling on anyone unexpectedly, which was viewed as creating a safe classroom environment. This was particularly useful to ESL students because it allowed for critical translation time necessary to understanding, as well as the development of communication skills. Another strategy reported was providing ample time with multiple forms of writing to promote the ESL student's ability to communicate and demonstrate understanding. More writing allows faculty to hear and learn more from the students, and it helps students to demonstrate their competence. Examples of ways that the teachers assessed ESL students' strengths and needs were through informal ungraded writing assignments and individual interactions within and outside of the classroom environment. These individual interactions were also a means for connecting with the students. Other ways that the teachers promoted making connections were through the use of journaling, group activities, reading aloud in class, and letter writing. These activities invited the ESL students to become insiders and participants. The results were that ESL students could share their personal perspectives and make connections to the content, and non-ESL students also benefited from the variety of perspectives that the diverse students brought to the classroom learning environment.

Relationship Between Teacher Background Attributes, Beliefs, and Practices

Just as patients come to the hospital to receive treatment that the nurse provides, students go to school to receive the education that teachers provide. Nurses and teachers are the foundations to these two institutions, respectively, and their actions have an enormous impact on the lives of patients and students. These professionals — nurses and teachers — have entered their professions with beliefs and attitudes that impact what they do. The beliefs are acquired through social learning, such as experiences and observations that they have had over their lifetime. According to Ajzen and Fishbein (2005), beliefs then influence attitudes, which are individualized dispositions to respond favorably or unfavorably toward an object of that attitude, such as a person or institution. People generally behave in ways consistent with their attitudes. However, many times moderating factors such as situations, knowledge, or emotions will affect the person's response and alter a behavior (Ajzen & Fishbein, 2005).

The relationship between a teacher's beliefs, attitudes, and behaviors (teaching) is not well defined in the nursing literature; however, nurse education researchers have observed that faculty members have perspectives and biases that may interfere with their ability to teach all students equally (Abriam-Yago, Yoder, & Kataoka-Yahiro, 1999). Moreover, faculty bias regarding culture and language can obstruct learning and impose barriers that inhibit students' success (Amaro, Abriam-Yago, & Yoder 2006).

Review of the educational literature was more fruitful and provided several reports about the relationship between educators' backgrounds, attitudes, beliefs, and their teaching interactions. Commins and Miramontes (2005), de Jong and Harper (2005), and Youngs and Youngs (2001) reported that beliefs about language acquisition

and teachers' own attitudes toward languages other than English affect the quality of instruction they provide to second language learners, and these attitudes play an important role in how students respond. Byrnes, Kiger, and Manning (1997) report that there have been numerous studies that have shown teachers' attitudes about language use and language minority children influence teaching practice and teacher expectations for student academic performance. Their frustrations over not understanding a child's language can turn to negative feelings and affect their interactions with the student.

Teachers may be unaware that the messages they send through classroom interactions and policies may be excluding ESL students and conveying negative attitudes toward the ESL student. These attitudes and beliefs have been shaped both by the teachers' social (life) learning and academic experiences (Byrnes, Kiger, & Manning, 1997).

Several background factors related to these social and academic learning experiences were found to be significant in teachers' attitudes and practices toward the ESL student. Attitudes and actions by teachers were related to:

- specific training in teaching ESL students (Byrnes, Kiger, & Manning, 1997; Garcia,
   1991; Kouritzin, 2004; Wong Fillmore & Snow, 2000; Youngs & Youngs, 2001)
- having lived in a linguistically diverse area (Byrnes, Kiger, & Manning, 1997;
   McAllister & Irvine, 2002)
- having life experiences with diverse peoples (Byrnes, Kiger & Manning, 1997;
   Kouritzin, 2004; Youngs & Youngs, 2001)
- travel abroad (McAllister & Irvine, 2002; Suarez, 2003; Smith, 2008)
- having learned a foreign language (Garcia, 1991; Smith, 2008; Youngs & Youngs,
   2001).

All of the factors have been reported in a positive fashion: Teachers who had these experiences had increased positive attitudes toward the ESL student. By default, it is possible that the lack of these social and learning experiences is related to negative attitudes and practices toward the ESL student — however that information was not portrayed in the literature.

## Summary

Clearly, teachers have a significant impact on students' learning and, indeed, their lives. It is important that teachers "ask themselves whether culturally different children are receiving unintended messages of domination, exclusion or hostility from the way they interact with their students themselves" (Corson, 2001, p. 64).

This literature review has demonstrated that there have been much research and publication in both the educational and nursing fields concerning education of ESL students. It was most interesting that recommendations found in the educational literature mirrored the recommendations found in the nursing literature — although, generally speaking, neither discipline referenced the other. However, what is lacking in the literature is information about what nurse educators believe about teaching ESL nursing students or what instructional strategies they use when interacting with the ESL nursing student. This literature review has provided sound evidence that there is a need for research into what nurse educators understand and believe about ESL nursing students, what background attributes influence those beliefs, and what teaching practices nurse educators use when providing instruction to ESL nursing students.

# Chapter III

### **METHODOLOGY**

To meet the healthcare needs of the growing diverse U.S. population, the profession of nursing needs to expand and become more culturally and linguistically diverse. Unfortunately, there are not enough culturally and linguistically diverse nursing students graduating from the nursing educational system to meet this demand, and this researcher found little evidence in the literature that focused on the role of the nurse educator in improving the success of the culturally and linguistically diverse nursing student. Additionally, there was little information about what nurse educators know or believe concerning teaching the linguistically diverse (ESL) nursing student, and more importantly, there was not any evidence in the literature about what distinct teaching practices nurse educators use when teaching these ESL nursing students, if any. It was hypothesized that nurse educators' background attributes influence their beliefs about ESL nursing students, and, in turn, these background attributes and beliefs influence the instructional strategies that nurse educators use when teaching ESL nursing students.

For this study, an exploratory correlational research design using a researcher-developed survey tool was used because non-experimental quantitative research that uses surveys provides a rich source of information from the participants, which can allow inferences to be made about the population and phenomenon being studied (Creswell, 1994). From this research study the following research questions were addressed.

## **Research Questions**

- 1. What are the instructional strategies nurse educators use when teaching ESL nursing students?
- 2. What beliefs do nurse educators hold about ESL nursing students?
- 3. What is the relationship between the beliefs that nurse educators hold about ESL nursing students and the instructional strategies they use when teaching ESL nursing students?
- 4. What is the relationship between nurse educators' background attributes and the beliefs they hold about ESL nursing students?
- 5. What is the relationship between nurse educators' background attributes and the instructional strategies that nurse educators use when teaching ESL nursing students?

## Developing the Pilot Survey Tool

The literature related to nurse educators, teaching ESL nursing students, and methods of survey research did not produce a suitable tool that could be used in this

research study. Therefore, it was necessary to develop a survey tool that would solicit the desired information. Dillman, Smyth, and Christian (2009) and Fowler (2009) recommend that the first step in developing questions for a survey is to conduct focused discussions with people who are in the population of the study about the issues to be studied. During the last five years as a nurse educator, this researcher has been conducting informal discussions with fellow nurse educators in the work setting of community college and university nursing programs. Additionally, this researcher has discussed the state of teaching ESL nursing students with fellow nurse educators at many local, regional, and national nursing educational meetings and conferences. This background information laid the groundwork from which the initial set of survey questions was developed.

The next step in drafting the initial questions was completed with a thorough review of the literature from both the educational and nursing disciplines. As described in chapter two, literature from the last 25 years that related to teaching ESL students in general and nursing students specifically was thoroughly evaluated. As a result, the questions developed for the pilot survey fell into three categories: nurse educator background attributes, nurse educator beliefs about teaching ESL nursing students, and nurse educator instructional strategies related to teaching ESL nursing students.

Developing Nurse Educator Background Attribute Questions

Because research found in the educational literature supported a relationship between a teacher's background and his or her beliefs about teaching ESL students, it was determined that developing questions related to the nurse educator's background experiences was imperative. Therefore, questions were developed that solicited demographic information about nurse educators that may impact their teaching ESL students, such as their experiences with other languages, their experiences of traveling abroad, and their educational preparation for teaching ESL students. From the literature review, the following six demographic variables were identified as having a potential impact on the nurse educator's teaching practices in relation to teaching the ESL nursing student. Following each variable is the operational definition used in this research.

- 1) Formal or informal training in teaching ESL students official college courses that contained specific education in teaching ESL students or continuing-education courses, workshops, or educational conferences that contained specific training related to teaching ESL students.
- 2) Life experiences with diverse populations personal experience with linguistically diverse populations, such as having traveled abroad, studied abroad, lived abroad, hosted a foreign exchange student, or living or having lived in a linguistically diverse area.
- 3) *Experience with other languages* studied or speak an additional language or has English as an additional language.
- 4) *Years teaching* the number of years teaching as a nurse educator, as reported by the nurse educator.
- 5) Years teaching ESL nursing students the number of years the nurse educator has taught ESL nursing students, as reported by the nurse educator.

6) Level of education — the level of education of the nurse educator according to the following categories: baccalaureate degree, master's degree, or doctoral-level education, as reported by the nurse educator.

#### **Developing Nurse Educator Beliefs Questions**

Questions related to nurse educator beliefs about teaching ESL nursing students were also based on evidence found in the nursing education literature. Additionally, several questions on the pilot survey were based on questions from two previous surveys that investigated general education teachers' beliefs regarding teaching ESL students in the K-12 grades. Byrnes, Kiger, and Manning (1997) developed a tool to investigate teachers' attitudes about language diversity, and Youngs and Youngs (2001) developed a tool to investigate the predictors of mainstream teachers' attitudes toward ESL students. These researchers were contacted, and permission was given to use their tool as a basis for question development for this pilot survey (Appendix A and Appendix B).

As a result of this process, 20 statements about nurse educators' beliefs about teaching ESL nursing students were developed for use in the pilot survey.

- ESL nursing students should learn to adapt to the standards of a rigorous nursing program.
- 2. ESL nursing students often use their language deficits as an excuse for not doing well in the nursing program.
- 3. Having an ESL nursing student in the classroom/lab/clinical setting is detrimental to other students' learning.
- 4. ESL nursing students are frequently lost or behind in the coursework.

- 5. Most ESL nursing students have difficulty in nursing programs due to their academic deficits that are not related to language challenges.
- 6. ESL nursing students do not invest sufficient time and effort into their learning experiences.
- 7. ESL nursing students' language differences hinder their ability to gain what they need from their learning experiences.
- 8. If ESL nursing students are able to converse well in English, then they should also be able to read and write at the same level.
- 9. I frequently am at a loss when it comes to teaching ESL nursing students.
- 10. An ESL nursing student's educational background is not important to my teaching strategies.
- 11. ESL nursing students should ask their teachers for help.
- 12. Because I have to spend so much time helping ESL nursing students to be understood, I am not able to assess their true ability.
- 13. ESL nursing students are difficult to teach.
- 14. Learning for all students is enhanced by the presence of ESL nursing students.
- 15. Pronouncing an ESL nursing student's name correctly is important to demonstrate inclusion.
- 16. It is important for me to learn about my ESL nursing students' experiences that have shaped their learning
- 17. Teaching in the classroom/lab/clinical setting is hampered by the presence of ESL nursing students.

- 18. Even though I am an experienced nursing educator, I need to learn more about how to teach ESL nursing students.
- 19. Even when they have linguistic deficiencies, ESL nursing students can still succeed in nursing coursework.
- 20. It should not be my responsibility to help ESL nursing students learn English.

Developing Nurse Educator Instructional Strategies Questions

The educational literature has a robust body of work related to teaching ESL students that focuses mainly on grades K-12. However, there is also a developing body of work that centers on the post-secondary ESL student. Many general educational practices used in the K-12 grades are developed and used in the post-secondary higher education system. Therefore, it is logical that best practices for ESL students in the upper secondary grades could also be applicable practices for post-secondary teaching. The nursing literature is also replete with research and recommendations for teaching ESL nursing students. A critical review of this literature provided the common themes of supportive activities, activities that promote language development, and specific teaching strategies related to the ESL nursing student. This researcher used these findings to further develop the draft questions specific to the nurse educator's pedagogical practices. Twenty-two statements were developed from the educational and nursing literature to be used in the pilot survey to solicit information on nurse educators' instructional strategies related to the ESL nursing student.

- 1. I make an effort to connect with the ESL nursing student on a personal level.
- 2. I strive to support the ESL nursing student by making the learning environment inclusive and accepting.
- 3. I routinely use stories, case studies, or scenarios to provide context for what I am teaching as an aid for the ESL nursing student.
- 4. When there are ESL nursing students listening to me, I make an effort to speak more slowly and clearly.
- 5. I provide ESL nursing students learning resources *prior to* the teaching session (for example, handouts, outlines, PPT slides, etc.).
- 6. I make an effort to pair a native-speaking nursing student with an ESL nursing student during learning activities.
- 7. Vocabulary lists specific to the course are developed and given to the ESL nursing student before the teaching session.
- 8. During learning activities in the classroom/lab/clinical setting I provide the ESL nursing student with clear directions and expectations.
- 9. I use some type of graphic organizer (concept map), diagram, picture, or visual aid when teaching ESL nursing students.
- 10. ESL nursing students are provided with informal frequent assessments to evaluate their learning during my course.
- 11. I avoid the use of "slang" terms in my teaching activities and speech when I have an ESL nursing student.
- 12. I help ESL nursing students access available school resources.

- 13. When ESL nursing students are using the nursing language during learning experiences, I allow extra time for them to practice speaking English.
- 14. ESL nursing students are encouraged to use translators or bilingual dictionaries in my classroom/lab/clinical setting.
- 15. I recommend additional resources (for example, study guides, computer-assisted programs, etc.) to ESL nursing students to support their understanding of the nursing content.
- 16. I encourage ESL nursing students to learn about the nursing content in their native language.
- 17. Exam questions are evaluated for linguistic bias before they are given to the ESL nursing student.
- 18. I have an "open door" office policy, and I encourage ESL nursing students to come see me.
- 19. ESL nursing students are given permission and encouraged to audiotape my lectures and teaching presentations.
- 20. I allow ESL nursing students extra time for thinking and processing when I interact with them in the classroom/lab/clinical setting.
- 21. I provide extra time for the ESL nursing student to complete exams.
- 22. When teaching, I help ESL nursing students identify key elements of the learning activity.

Establishing Validity of the Initial Survey Questions

Dillman, Smyth, and Christian (2009) and Fowler (2009) describe how to enhance the validity of survey tools. Validity is established when the survey questions solicit answers that correspond with what the survey tool was intended to measure. The first step in establishing tool validity was completed by cross-referencing each survey question with information found in the literature. As described earlier, each question on the survey tool was developed from content found in the educational and nursing literature. The next step intended to increase the survey's validity was completed by having experts in both the educational and nursing education field review and provide feedback on the survey questions. This researcher consulted with two expert nurse educators and one expert second-language educator from universities that have a rich background in teaching and research related to ESL students. The experts were given draft survey questions, and each provided both written and verbal feedback that was used to enhance the content validity of the questions. From this expert analysis, the final pilot survey questions were developed for each of the three domains of interest: background attributes, nurse educator beliefs, and nurse educator instructional strategies.

In addition to the survey questions regarding nurse educator background attributes, beliefs, and instructional strategies, general demographic questions about the nurse educators' nursing programs were developed. Using questions about the nurse educator's nursing program in both the pilot survey and the national survey provided simple, non-sensitive, general questions for the beginning of the survey that helped establish a comfort and familiarity with the survey tool (Dillman, Smyth, & Christian,

2009). Additionally, data collected about program information may be useful for future analysis to provide more insight into teaching the ESL nursing student.

## Pilot Survey Methodology

Once the final list of questions was determined, the survey questions were arranged in a user-friendly format and uploaded into the electronic survey program SurveyMonkey©. Recommendations by Dillman, Smyth, and Christian (2009), Fowler (2009), and Rea and Parker (2005) were used to make the survey easy to use and to decrease the influence of paradata. Question placement in the program was designed to have easy questions come first and sensitive questions later in the survey. The survey was laid out so that questions were of different design and type to decrease respondent boredom, yet it also was designed to be clear and straightforward to minimize confusion (Dillman, Smyth, & Christian, 2009; Fowler, 2009; Rea & Parker, 2005). The demographic background questions were formatted to provide nominal data with yes/no or categorical responses for information related to training in ESL teaching, life experiences with diverse populations, experiences with foreign languages, and level of professional education for teaching. Interval data were collected using an open-ended response format to obtain information about the respondent's number of years teaching in general and teaching ESL nursing students specifically.

The beliefs and teaching strategies scales were formatted to collect ordinal data via a Likert-like scale for the response format. Both scales had a four-point response format with the beliefs scale containing the following response options: strongly disagree,

disagree, agree, and strongly agree. The teaching strategies scale used these response options: not usually, sometimes, most of the time, and all of the time. The four-point, Likert-like response format was used because an even number of responses eliminated the number in the middle of the scale and forced the respondent to make a choice instead of making a neutral response (Clark & Watson, 1995). This format was chosen because the researcher wanted nurse educators to provide specific information in either a positive or negative response format. Response format scales that have a middle position allow respondents to "avoid making decisions and stating their opinion." (Spiliotopouou, 2009, p. 152).

Prior to sending the survey out as a pilot, the survey was field tested. Three nurse educators and two higher-education educators completed the online electronic survey and provided information about the time required to complete the survey, visual attractiveness, word clarity, and understandability of the survey questions. Feedback from this field test was used to make final adjustments to the pilot survey. The final tool that was used in the pilot survey can be found in Appendix C.

It was important to have an adequate sample of nurse educators complete the pilot survey to gather data that could be used to evaluate the survey items, identify any items that should be dropped from the instrument entirely, and determine if there were items that could be grouped together into domains or subscales using factor analysis. Sample size is crucial to credible statistical analysis, and there have been a wide range of sample size recommendations. Clark and Watson (1995) strongly recommended that a proposed survey be pilot tested on a "moderately sized sample" (p. 313) of 100–200 subjects.

According to Munro (2001), "a ratio of at least 10 subjects for each variable is desirable

to generalize from the sample to a wider population. ... Another perspective on sample size is that because it is based on correlation, 100–200 subjects are enough for most purposes." (p. 310). In this pilot survey there were two scales: the beliefs scale and the instructional strategies scale. Both scales had about 20 items; therefore, a sample size of about 200 subjects met both of the above-listed criteria for appropriate sample size.

A convenience sample of nurse educators was used as subjects for the initial pilot survey. The sample frame of nurse educators from which the sample subjects were drawn for this pilot survey was the about 1,400 nurse educators who attended the 2009 National League for Nursing (NLN) Education Summit. This researcher attended the summit and was provided with a participant list of nurse educators from across the United States, which was given to all participants for the explicit purpose of networking. The email addresses of the participant list was scanned and uploaded into a spreadsheet from which the sample was drawn.

Response rates for survey research vary widely and depend on a multitude of factors. According to Fowler (2009), response rates for faculty have been reported from 30 percent to 60 percent for web-based surveys; therefore the goal of a response rate of about 35 percent was established. To obtain the desired sample size of about 200 subjects for factor analysis, 600 randomly selected participants from the list were invited to participate in the pilot survey.

An e-mail that provided information about the pilot survey and contained a link to the online pilot survey (Appendix D) was sent to these randomly selected nurse educators. This researcher regularly tracked the number of respondents. After three weeks, there were about 125 respondents (20 percent response rate). To enhance the

response rate, a second e-mail was sent to the same selected nurse educators to invite them once again to participate if they have not already done so. Within one week, the desired number of respondents (205) was achieved. The pilot survey was then set to "complete" in SurveyMonkey, and no further surveys were collected. The final response rate for the pilot survey was 34 percent.

#### Instrumentation:

Refinement of the Survey Tool Based on Analysis of the Pilot Survey

This researcher collected the pilot survey results from the SurveyMonkey© database and downloaded into an Excel file. Data from the survey results were appropriately coded and then uploaded into the SPSS Statistics 17 for data analysis. The intent of this analysis was to determine which survey questions should remain in the survey; which questions, if any, should be removed from the survey because they did not add value; and which questions, if any, could be grouped together to form subscales. Exploratory Factor Analysis (EFA) is the statistical means used to deconstruct a phenomenon of interest to reveal underlying variables that may contribute to the phenomenon of interest. When factors cluster into meaningful groups, factorial validity is inferred. In EFA the data set from a group of interrelated variables is evaluated and reduced to a smaller set of factors that explain the maximum amount of variance using the smallest number of explanatory constructs (Field, 2009). In this pilot survey, the data from the beliefs scale and the data from the instructional strategies scales were analyzed using EFA.

## Evaluating the Beliefs Scale

The pilot survey contained 20 questions related to beliefs that nurse educators hold about teaching the ESL nursing student. An iterative process of EFA using principle component analysis with varimax rotation and Kaiser normalization was used to evaluate the data, as recommended by Mertler and Vannatta (2005). The initial data run resulted in the variables with an eigenvalue of >1.0 loading on six factors that accounted for 58.3 percent of the variance. One factor had only one variable; further examination of that variable indicated that it did not add value to the understanding of nurse educators' differences in beliefs because the majority of the respondents agreed that the ESL nursing student should meet the requirements of the nursing program.

The second and third data runs in this iterative process using the same criteria provided evidence that three more questions should be eliminated. Again, there was minimal variation because a large majority of the respondent nurse educators agreed that ESL nursing students should ask for help, that it is not the nurse educator's responsibility to teach the English language, and that the educational background of the ESL nursing student does not influence teaching. According to Clark and Watson, when respondents "answer similarly, items convey little information" (p. 315) and should be carefully evaluated for usefulness.

The final EFA of the remaining 16 questions related to nurse educator beliefs converged into four distinct categories that accounted for 53.6 percent of the variance. An important evaluation of the EFA is identifying what item variables load on a factor.

According to Field (2009), researchers typically consider a factor loading of >0.30 to be important. When the rotated component matrix was reviewed, all variables loaded > 0.40

on one of the factors. The variables that loaded > 0.40 on a factor were clustered together for content analysis evaluation and consideration of the question clusters for parsimony and themes. This analysis resulted in four domains of the nurse educators' beliefs related to teaching the ESL nursing student, which can be found as subscales listed in Table 3.1.

Table 3.1

Factor Loading and Resulting Subscales for Educator Beliefs

FACTOR	1	2	3	4
SCALE A: Beliefs about the ESL nursing student impact of	n the lea	rning envi	ironment	
Having ESL nursing students in the classroom/lab/clinical setting is detrimental to other students' learning.	.158	-3.07	.578	.137
ESL nursing students who are able to converse well in English should also be able to read and write at the same level.	214	.142	.731	099
ESL nursing students often use their language deficits as an excuse for not doing well in the nursing program.	.240	021	.654	.195
Teaching in the classroom/lab/clinical setting is hampered by the presence of ESL nursing students.	.396	343	.520	.304
SCALE B: Beliefs about the impact of language differences	s on the	ESL nursi	ng stude	nt
ESL nursing students are frequently lost or behind in the coursework.	.318	125	.035	.700
Most ESL nursing students have difficulty in nursing programs due to their academic deficits that are not related to language challenges.	135	072	.381	.597
ESL nursing students do not invest sufficient time and effort into preparation for their learning experiences.	.171	096	.462	.424
ESL nursing students' English language deficits hinder their ability to gain what they need from their learning experiences.	.432	.034	.021	.590
SCALE C: Beliefs about the impact of the ESL student on teaching				
I frequently feel that I am not an effective educator when it comes to teaching ESL nursing students.	.756	.030	.096	.087
Because of English language deficits, I have difficulty assessing ESL nursing students' competency.	.727	158	.023	.114
ESL nursing students are difficult to teach.	.587	108	.190	.279

Table 3.1 (cont.)

	FACTOR 1	2	3	4
SCALE D: Beliefs about the value of the ESL nu	rsing student			
Learning for all students is enhanced by the presen ESL nursing students.	ce of300	.505	393	.050
Pronouncing ESL nursing students' names correctly important to demonstrate inclusion.	/ is041	.749	126	.275
It is important for me to learn about my ESL nursing students' experiences that have shaped the learning		.630	.071	259
Even though I am an experienced nursing educator to learn more about how to teach ESL nurs students.		.579	026	014
Even when they have English language deficiencies nursing students can still succeed in nursing coursework.	·	.557	063	291

The next step in evaluating this belief scale and the resultant subscales was to calculate the reliability of this part of the survey tool. According to Clark and Watson (1995), "internal consistency refers to the overall degree to which the items that make up a scale are intercorrelated, whereas homogeneity and unidimensionality indicate whether the scale items assess a single underlying factor or construct" (p. 315). Cronbach's alpha is the most common standard for assessing the reliability of a scale by evaluating the items' internal consistency. Field (2009) reports that an alpha "value of .7 to .8 is an acceptable value for Cronbach's  $\alpha$ ; values substantially lower indicate an unreliable scale" (p. 675). However, he goes on to report that general "guidelines need to be used with caution because the value of  $\alpha$  depends on the number of items on the scale," and scales with a smaller number of items tend to have lower  $\alpha$  coefficient values (p. 675). Additionally, Clark and Watson report that a scale with strongly intercorrelated items may be redundant and provide little information about the construct so that construction of the tool to maximize validity is more important than maximizing reliability. The overall

belief scale Cronbach α score was 0.602, which is considered acceptable for new tool development (Clark & Watson, 1995). The subscales had similar adequate reliability coefficients that support the reliability of this new tool (see Table 3.2 on next page)

However, consideration was also given to the impact that the choice of using a four-point, Likert-type scale may have had on the reliability of the tool used in the pilot study.

According to Chang, Frost, Chao, and Ree (2010) "scales with a neutral midpoint tend to produce data of higher reliability and validity than scales without midpoints" (p. 9).

Spiliotopoulou (2009) also provided additional support for using a Likert-like scale with a midpoint reporting that "scales with a central point (e.g., 5 points) tend to have a higher alpha estimate in comparison to scales with an even number of points" (p. 152).

Therefore, the Likert-like format response in the final survey tool was modified to have a five-point, Likert-type scale with the midpoint having the response of "not sure."

Table 3.2

Reliability of the Belief Scale

ENTIRE 16-ITEM BELIEFS SCALE	Cronbach α score .602
SUB SCALE A: Beliefs about the ESL nursing student impact on the learning environment	.613
SUB SCALE B: Beliefs about the impact of language differences on the ESL nursing student	.589
SUB SCALE C: Beliefs about the impact of the ESL student on teaching	.649
SUB SCALE D: Beliefs about the value of the ESL nursing student	.608

Evaluation of the Instructional Strategies Scale

The pilot survey contained 22 questions related to the practices that nurse educators may use when teaching the ESL nursing student. The same iterative process of EFA using principle component analysis with varimax rotation and Kaiser normalization was used to evaluate the data collected with the pilot study for the instructional strategies scale. The initial data run resulted in the variables with an eigenvalue of >1.0 loading on six factors that accounted for 58 percent of the variance. Although analysis of the literature related to teaching practices for ESL students (see Table A in chapter two) revealed the themes of supportive activities, language development, and teaching strategies, the EFA did not converge on any specific factors and, thus, did not support any subscales with these specific domain themes. Many of the variables in the instructional strategies scale loaded at a > 0.40 value on several factors. This lack of differentiation into subscales indicated that the variables are closely connected; as per the recommendation by Clark and Watson (1995), identification of subscales was abandoned in favor of a single overall score for the instructional strategies scale. Closer evaluation for usefulness of the individual items on the scale revealed that two questions had a very high loading on one factor. It was determined that these questions were redundant because they were strategies that nurse educators use for all students and were not particular to ESL nursing students. Nurse educators routinely provide handouts to students via electronic postings to school course websites at least one day before teaching sessions, and they also routinely allow nursing students to audiotape lectures for personal study use. After careful examination, these two questions were dropped from the final teaching strategies scale to make the scale more parsimonious.

The instructional strategies scale was evaluated for reliability and usefulness of the four-point, Likert-like response following the same format as used in the beliefs scale evaluation. Reliability of the 20-question instructional strategies scale was evaluated using the Cronbach  $\alpha$  coefficient with a resultant value of 0.860, which is considered to be strong reliability (Clark & Watson, 1995; Field, 2009). The four-point response format was examined for appropriateness in light of the evaluation completed for the beliefs scale. Considering there was a high level of reliability for the instructional strategies scale, and that a neutral point would be difficult to identify in relation to the frequency of performing an activity, the four-point, Likert-like response format was kept.

# National Study Using the NEABIS Survey

Instrumentation: Nurse Educator Attributes, Beliefs, and Instructional Strategies (NEABIS).

The final survey tool developed from the information gained from the pilot survey contained 52 questions — of which, nine were general questions related to the nurse educator and the nursing program; seven asked for information about the nurse educator's background *attributes*; 16 solicited information about the nurse educator's *beliefs* related to the ESL nursing student; and 20 garnered information about the *instructional strategies* the nurse educator reports using. For the remainder of this research study, the survey title used is Nurse Educator Attributes, Beliefs, and Instructional Strategies (NEABIS), and the final survey can be found in Appendix E.

#### **Ethical Considerations**

The following procedures were employed for both the pilot survey and the national research study, both of which were required for this research. Ethical research requires that participants have the right to expect certain basic protections when participating in research projects: confidentiality, anonymity, and informed consent. Prior to sending out the survey in the pilot study, approval of the research study by the College of Notre Dame Institutional Review Board (IRB) was obtained to ensure participant safety (see Appendix F). To enhance the anonymity of survey participants in both the pilot survey and the national study, the electronic survey tool in SurveyMonkey© was constructed so that the IP addresses of the computer were not collected. Additionally, any publications resulting from this research will never include subject-specific identifying information. Confidentiality of survey participants was ensured through the anonymous collection of information. All of the information collected has been held on this researcher's home computer, which is password protected for security and only accessible by this researcher.

After reading the e-mail invitation to participate in the national research study (see Appendix D), the potential study participant was invited to "click on the link" to continue on to the NEABIS survey. The first page of the online survey contained the informed consent (see Appendix G) that included the following information:

- 1. the purpose of the NEABIS survey and the research study
- 2. the time commitment required to participate in the NEABIS
- 3. provisions for confidentiality and anonymity
- 4. the freedom to participate or withdraw from the NEABIS at any time

- assurance that no adverse consequences would result by participating in the NEABIS
- 6. information about how the NEABIS results were to be used.

Population and Sample Selection for the National Research Study

The population eligible for inclusion in the research study was all nurse educators teaching in an associate or baccalaureate degree nursing program in the United States. According to the 2008 National Sample Survey of Registered Nurses (HRSA, 2010), there are about 31,000 nurses who report working "as faculty in their principal nursing position" (p. 4-2). Unfortunately, there is not a national list of all nurse educators in the United States, and the e-mail lists of nurse educators who belong to the nurse educator professional organizations were not available to this researcher. However, the National Council of State Boards of Nursing has a list of all registered nurse programs in the United States that produce nursing graduates who are eligible to sit for the licensure exam. This list contains about 2,000 nursing programs that prepare students at the baccalaureate or associate degree level for entrance into the nursing profession. This list was used as a basis for developing a national list of nurse educators who teach in associate or baccalaureate programs. The inclusion criteria for this working population was nursing faculty who teach full time in one of these associate degree or baccalaureate degree nursing programs in United States. Mertler and Charles (2008) describe adequate sample size for large populations.

For survey research studies, a common recommendation is to sample approximately 10-20 percent of the population. With large populations, this can obviously become cumbersome. Gay, Mills & Airasian (2006) assert that once population sizes of a certain magnitude (about N = 5,000)

are exceeded, population size becomes irrelevant and a sample size of n = 400 will provide adequate representation (p. 128).

The population of nursing educators exceeds the large magnitude of N = 5,000; therefore, a desired final sample size of 400 nurse educators was the goal. The survey response rate to the pilot survey was 34 percent; however, it was distributed to a convenience sample of nurse educators that attended a conference with the researcher. This familiarity may have influenced the respondents and they may have been more apt to respond to the request. The response rate for the national survey was set at a more realistic rate of 20 percent, which then required that there be a sample of at least 2,000 nurse educators who were invited to participate.

According to Rea and Parker (2005), the "ultimate accuracy of a sample depends in large part on how well the sampling frame is constructed" (p. 161). Great care was taken to develop the list of nurse educators from which the sample frame of nurse educators was taken so that it was an approximate representation of the population of nurse educators in the United States. According to Fowler (2009), when "there is no adequate list of individuals in a population and no way to get at the population directly, multistage sampling provides a useful approach" (p. 28). Therefore, a multistage cluster sampling method was employed as follows:

- The list of schools that have programs of nursing that educate students at the
  associate or baccalaureate level of nursing in preparation for taking the licensure
  exam was obtained from the NSCBN (2009).
- 2. States were divided into the four regions (Midwest, Northeast, South, West), as identified by the U.S. Census Bureau (n.d.). See Table 3.3 for the regional list.

- 3. Schools from each region were then identified with an attempt to gather schools from urban, rural, private, public, small, and large institutions. This researcher visited schools' websites and obtained the e-mail addresses of nurse educators from the nursing programs. A final list of about 2,000 nurse educators from each region was developed (total sample frame of 8,000 e-mail addresses of nurse educators in the United States).
- 4. A random sample of 500 nurse educators' e-mail addresses was taken from each region's sample frame with a final sample of 2,000 nurse educators from nursing programs in the United States who were invited to participate in the research study.

Table 3.3

Census Bureau Regions: U.S. Census Bureau (n.d.)

Region I: Northeast	Region 3: South	
Connecticut	Alabama	Maryland
Maine	Arkansas	Mississippi
Massachusetts	Delaware	North
New Hampshire	District of Columbia	Carolina
New Jersey	Florida	Oklahoma
New York	Georgia	South
Pennsylvania	Kentucky	Carolina
Rhode Island	Louisiana	Tennessee
Vermont		Texas
		Virginia
		West Virginia

Table 3.3 (cont.)

R	Region 2: Midwest Region		on 4: West
Illinois	Ohio	Alaska	Nevada
Indiana	South Dakota	Arizona	New Mexico
lowa	Wisconsin	California	Oregon
Kansas		Colorado	Utah
Michigan		Hawaii	Washington
Minnesota		Idaho	Wyoming
Missouri		Montana	
Nebraska			
North Dakota			

## Data Collection and Recording Procedures

Following the same procedure that was used for the pilot survey, the NEABIS survey was uploaded into the electronic program SurveyMonkey©. As with the pilot study, recommendations by Dillman, Smyth, and Christian (2009); Fowler (2009); and Rea and Parker (2005) were used to make the survey easy to use and to decrease the influence of paradata. Question placement in the program was the same as the pilot survey so that easy questions came first, and sensitive questions were placed later in the survey. The survey was laid out so that questions were of different design and type to decrease respondent boredom, yet it was kept clear and straightforward to minimize confusion.

Nurse educators, as identified through the multistate cluster sampling method, were contacted by e-mail with an invitation to participate in the research study. The e-mail provided information about the study and contained a link to the online NEABIS survey. After reading the e-mail invitation to participate, the nurse educator simply needed to "click on the link" to access the survey (see Appendix F).

This researcher tracked the number of respondents to the survey after the e-mails were distributed to the nurse educators. To enhance the response rate, a second e-mail reminder was sent to the nurse educators 10 days after the first e-mail to remind them to participate if they have not already done so. Two weeks after the initial deployment of the survey invitations, the goal of having a sample of a minimum of 400 nurse educator participants was obtained. In total, 450 nurse educators had responded to the survey, and the survey was closed.

The data was downloaded from SurveyMonkey© into an Excel file. Data points were appropriately coded and then uploaded into SPSS for data analysis.

## **Data Analysis**

This research study evaluated the relationships between the independent (predictor) variables of the nurse educator attributes and the dependent (outcome) variables of nurse educator beliefs about ESL nursing students and the instructional strategies implemented by nurse educators when teaching these students. Additionally, the relationship between the independent (predictor variable) of nurse educator beliefs about ESL nursing students and the dependent (outcome) variable of nurse educator instructional strategies implemented when teaching these students was evaluated. The alpha level of significance for each analysis was set at p = < 0.05 in this research study.

The data consisted of nominal, ordinal, and interval data, which were used in multiple statistical evaluations to answer the research questions. Descriptive statistics were used to summarize the data. Frequencies, percentages, and measures of central tendency provided an overview of the sample's general characteristics and specific

identified nurse educator attributes under study. Additionally, the descriptive statistics were used to begin to answer the questions regarding nurse educator beliefs about and instructional strategies used when interacting with the ESL nursing student. The belief scale was evaluated for the frequency and percentage of nurse educators who agreed or disagreed with the statements about ESL nursing students. Evaluation of the instructional strategies scale using the frequency that educators employ these various strategies provided information about the nurse educators' teaching practices.

Inferential statistics were employed to evaluate the various relationships between the independent (predictor) variables and the dependent (outcome) variables. The Spearman rho correlation coefficient was used to investigate the correlation between the nurse educator's beliefs about the ESL nursing student and the instructional strategies used when teaching the ESL nursing student. Multiple linear regression analysis was employed to examine and explain the relationship of the independent variables of nurse educator attributes with the dependent variables of nurse educator beliefs about and instructional strategies used when teaching ESL nursing students.

Spearman's rho correlation coefficient is a numerical index that indicates the strength and direction of a relationship between two variables. Spearman's rho is a non-parametric test that is a variant of Pearson's r correlation coefficient and is appropriate for use in data analysis when at least one variable is of an ordinal-scale level. It is used when the data have not met the basic assumptions of the Pearson correlation coefficient. Likert-like data in which responses are subsequently converted to numbers do not meet the requirements of the Pearson r because they are ordinal and not interval-level data. Spearman's rho also differs from Pearson's correlation in that the former is applied to the

scores of the two variables being evaluated after the scores have been ranked from the smallest to the largest. Spearman's rho correlation coefficient is a numerical measure of the amount of association between these two sets of scores. It ranges in size from a maximum positive relationship of +1.00 through no relationship with a score of 0.00 to a maximum negative relationship measured as a score of -1.00. A positive correlation indicates that the scores on one variable increase as the scores on the other variable also increase. A negative correlation indicates that as the scores on one variable increase, the scores on the other variable decrease. The closer a correlation coefficient is to zero, the weaker the relationship is between the two variables. When examining the relationship between the two variables, a score below 0.10 is considered to be weak to nonexistent; a score of about 0.30 is a moderate correlation; and a score approximating 0.50 indicates a substantial correlation between the variables, whether the relationship is negative or positive (Field, 2009; Munro, 2001; Plichta & Garzon, 2009).

The data collected from the NEABIS survey were analyzed using the Spearman rho correlation coefficient to investigate the correlation between the nurse educator's beliefs about the ESL nursing student and the instructional strategies used when teaching the ESL nursing student. The use of instructional strategies was measured using the Likert-like scale of instructional strategies contained in the NEABIS survey, which rank ordered the nurse educators' responses about use of instructional strategies on a four-point scale from "not usually" to "all of the time." These labels were then converted to a scale of one to four. The nurse educators' beliefs about the nursing student were measured by the subscales of the five-point, Likert-like beliefs scale contained in the NEABIS survey, which rank ordered agreement with the belief statement from "strongly

disagree" to "strongly agree." These labels were then converted to a scale of one to five.

Using the Spearman rho correlation coefficient, each subscale of the beliefs scale was independently evaluated for its correlation to the instructional strategies scale.

Multiple linear regression analysis was employed to examine and explain the relationship of the independent variables of nurse educator attributes with the dependent variables of nurse educator beliefs about and instructional strategies used when teaching ESL nursing students. General regression analysis is a statistical tool that looks at the simultaneous impact of a set of independent variables on a single dependent variable. Many independent variables may be related to one another, as well as to the outcome of interest; therefore, multiple regression analysis provides a means to investigate the unique effects of several factors on the dependent variable, as well as a way to learn how much the independent variables can explain the overall amount of variance in the dependent variable. Additionally, multiple linear regression analysis can also be used to determine which of the independent predictors has the strongest effect on the dependent variable (Field, 2009; Mertler & Vannatta, 2005; Munro, 2001; Plichta & Garzon, 2009). There are various methods used in the process steps of multiple linear regression analysis: hierarchical, forced, and stepwise. The hierarchical method is most commonly used when there is past research to guide the order in which the predictor variables are evaluated. The forced method allows the computer program to evaluate all of the predictor variables together. The stepwise method allows the computer to perform multiple variations on the predictor variables to determine the best fit. According to Mertler and Vannatta (2005), "stepwise multiple regression, also sometimes referred to as statistical multiple regression, is often used in studies that are exploratory in nature ... to determine which

specific IV's [independent variables] make meaningful contributions to the overall prediction" (p. 170). Because this research study is exploratory in nature, stepwise multiple regression was the method used.

Accurate results using multiple regression analysis depend upon using the appropriate data. Plichta and Garson describe that the dependent variable should be at the interval level; however, according to Munro (2001), "valid results also may be obtained with ordinal data" (p. 246.) Regression analysis is similar to the Pearson correlation coefficient in that when ordinal data from a Likert-like scale is summed into a total score, the data can be used as interval data (Field, 2009). In regression analysis, the independent variables used can be of any scale level, but nominal variables need to be dichotomous in nature. In this research study, the dependent variables were the total score on the instructional strategies scale and the individual total scores for each of the subscales on the beliefs scale. The independent variables were these six nurse educator attributes: 1) level of education, 2) years teaching as a nurse educator, 3) years teaching the ESL nursing student, 4) experience with other languages, 5) life experiences with cultural and linguistic diversity, and 6) total training (informal or formal) for teaching ESL nursing students. The independent (predictor) variables were put into these six categories based on this researcher's analysis of the literature, which supported selection of these general categories, and analysis of the data collected, which showed these variables were appropriate for the analysis (Field, 2009). The independent variables that were categorical in nature (level of education and diverse life experiences) were recoded into individual dichotomous categories for analysis.

#### **Summary**

This survey research allowed participants to provide sensitive information about nurse educator demographic attributes, beliefs about teaching ESL nursing students, and teaching practices used when teaching ESL nursing students in an easy-to-use, Internetbased survey tool developed by this researcher. Ethical practices were employed, and IRB permission was obtained from the Notre Dame of Maryland University (formerly the College of Notre Dame of Maryland) to conduct this research. The validity of the survey tool was established by using the deliberate steps of literature review, expert panel evaluation, and pilot study. Data collected during the pilot study was evaluated using factor analysis to determine which items should be grouped together into subscales and which items should be dropped from the instrument entirely. The final Nurse Educator Attributes, Beliefs, and Instructional Strategies (NEABIS) survey contained 52 questions. The national survey sample population consisted of about 31,000 nurse educators who teach in one of the nursing programs in the United States. A multistage cluster sampling technique identified about 2,000 nurse educators who constituted the sample who were invited to participate in this research study. An e-mail was sent to these nurse educators that provided them with information about the study and invited them to participate. Information was included at the beginning of the survey that allowed informed consent to be obtained. The final sample consisted of 450 respondents, which yielded a response rate of 22.5 percent. Data collected from the national survey were evaluated using several statistical analysis methods to describe the sample characteristics and determine the relationships between the independent variables of nurse educator attributes and the

dependent variables of nurse educator beliefs about and instructional strategies used when teaching the ESL nursing student.

## Chapter IV

#### RESULTS

#### Introduction

The NEABIS survey was distributed to a national sample of randomly selected nurse educators who provided information related to their background attributes, their beliefs related to ESL nursing students, and the instructional strategies they report using when teaching these students. Of 2,000 invitations to participate, 453 respondents returned the NEABIS survey; 11 respondents answered fewer than three questions, so their surveys were deemed unusable for the data pool. Therefore, the data pool consisted of 442 participants for a response rate of about 22%. Not all participants answered all questions, so the resulting *n* varies throughout the data analysis. Based on the type of statistical analysis used, an individual datum point may not have been used, or the entire set of information for that cluster of data has been removed. The data were explored using the SPSS 17 Statistical Analysis package. Descriptive statistics were employed to analyze the sample population. Descriptive statistics and inferential statistics were used to answer the research questions.

## Description of the Sample

Demographics: Age - Ethnicity/Race - Education Level

Categorical data collected from 426 of the participants revealed nearly half of the nurse educators were 51–60 years old. Table 4.1 shows only two respondents were younger than 30 years old; 33% were 30–50 years old; and 17% were older than age 60. Of the 419 participants who self-identified into an ethnicity/race category, the majority (89%) were white. Table 4.1 also shows about 4% selected Black/African; 3% selected more than one category; and the remaining 4% selected one of the American Indian, Asian, Hispanic, or Hawaiian/Pacific Islander categories. The respondents reported an average of 14 years of experience teaching as a nurse educator, with a range of 1–50 years (*n*=398). Evaluation of the preparation for their role as a nurse educator showed 4% had a baccalaureate degree as their highest level of education; 60% had a master's degree; and 36% were prepared at the doctoral level (Table 4.1).

Table 4.1

Demographics: Age - Ethnicity/Race - Education Level

AGE	n	%
Younger than 30	2	.5
31—40	42	9.9
41—50	95	22.3
51—60	212	49.8
Older than 60	75	17.6
Total	426	100.0

Table 4.1 (*cont.*)

ETHNICITY / RACE	n	%
American IN	4	1.0
Asian	7	1.7
Black/African	18	4.3
Hispanic	3	.7
Pacific Islander	1	.2
White	373	89.0
Multi	13	3.1
Total	419	100.0
EDUCATIONAL LEVEL	n	%
BSN	17	3.9
MSN	262	60.5
Doctorate	154	35.6
Total	433	100.0

Although there are limited national data available about nurse educators, it is important to compare the findings and information reported in this study with what is known about the overall nurse educator population in the United States. According to the most recent data about the registered nurse population from the U.S. Department of Health and Human Services (HRSA, 2010), the nurse faculty workforce is continuing to age; almost 60% of the nation's nurse educators are older than age 50. Although 24% of the fulltime faculty in nursing programs have a doctorate degree (PhD, EdD, DNP), the majority of nurse educators (64%) nationally have a master's degree as their highest level of education, and a majority (60%) work in baccalaureate degree nursing programs (HRSA, 2010). The demographics of the NEABIS survey participants approximate these basic national demographics, but information about U.S. nurse educators concerning the

to teaching ESL nursing students is not available. It is logical, however, to make the case that if the basic demographics of the survey participants mirror the nation's nurse educator population, the background attributes, beliefs, and instructional strategies reported by the research sample may also be mirrored in the U.S. population of nurse educators.

Demographics: Location/Type of School

Further support for these research findings being reflective of the U.S. nurse educator population was found in the distribution of the survey respondents, which was evenly spread across the nation. About 25% of the sample population was found in each of the four regions of the United States with 24% from the Northeast, 26% from the Midwest, 26.5% from the South, and 24.5% from the West (Table 4.2). Table 4.2 also shows the nurse educators were evenly distributed among the three the types of schools (community college, private college/university, and state college/university); the majority of nurse educator participants (70%) were from urban schools.

Table 4.2 Demographics: Location/Type of School

# **Location of School**

n = 434

NORTHEAST	[24%]	n
Connecticut		6
Maine		1
Massachusetts		23
New Hampshire		6
New Jersey		7
New York		44
Pennsylvania		8
Rhode Island		7
Vermont		2
	Total	104
· · · · · · · · · · · · · · · · · · ·		·

WEST	[24.5%]	n
Alaska		0
Arizona		5
California		52
Colorado		2
Hawaii		5
Idaho		8
Montana		8
Nevada		3
New Mexico	0	6
Oregon		2
Utah		5
Washingtor	า	8
Wyoming		2
-	Total	106
<u>-</u>	·	

SOUTH [25%]		n
Alabama		1
Arkansas		1
Delaware		2
District of Columbia	l	2
Florida		25
Georgia		2
Kentucky		2
Louisiana		3
Maryland		18
Mississippi		6
North Carolina		17
Oklahoma		3
South Carolina		3
Tennessee		5
Texas		11
Virginia		7
West Virginia		1
	Total	109

MIDWEST [26	.5%]	n
Illinois		10
Indiana		24
Iowa		3
Kansas		3
Michigan		5
Minnesota		4
Missouri		8
Nebraska		10
North Dakota		1
Ohio		14
South Dakota		7
Wisconsin		26
	Total	115

Location of School		<i>n</i> =439	Type of Sc
	n	%	
Urban	311	70	Community
Rural	128	30	Private Col
			State Colle

Type of School		n=437
	n	%
Community College	160	36.6
Private College	121	27.7
State College	156	35.7

Demographics: ESL nursing student population and Specific Training for Teaching ESL Students

Data reported by the National League for Nursing (NLN, 2011), the American Association of Colleges of Nursing (AACN, 2011), and the Health Resources and Services Administration (HRSA, 2010) of the U.S. Department of Health and Human Services only include demographic information about nursing students' race / ethnicity. Information related to the enrollment of ESL nursing students in nursing programs is not available. National information concerning minority populations in nursing educational programs was included here to provide a comparison of the ESL nursing student enrollments estimated by the nurse educators in this survey. HRSA (2010) reported that approximately 22% of recent nurse graduates were considered being in a minority category, NLN (2011) reported that in the academic year 2008-2009 approximately 29% of nursing students were in a minority category, and the AACN (2011) reported that 27% of nursing students were from a minority category in 2010. In the U.S. it is a common assumption that the ESL population is a subset of the minority population. The reporting of ESL nursing student demographics in this survey did not include race / ethnicity, only linguistic differences; nurse educators in this survey reported that the percentage of ESL nursing students in their programs ranged from zero (0) to 80%, with nearly half of the programs having between 2% –10% ESL nursing student enrollments (chart 4.1). This is a significant amount of ESL nursing students that nursing educators impact on a daily basis.

The nursing educators in this study reported teaching ESL nursing students for an average of 11 years. Responding to the query regarding specific training for teaching

ESL nursing students, only 4% reported having some sort of formal training (college coursework), but 39% reported having some form of informal training (Table 4.3). Since the type of informal training was not specified, nurse educators in this study were free to determine what informal training meant to them. Most importantly, the majority of nurse educators in this survey (nearly 57%) reported having had no training or preparation to teach ESL nursing students. Considering that nurse educators have little graduate education preparation with regard to pedagogy prior to entering the educational venue (Oermann & Jamison, 1989; Zungolo, 2004; Bartles, 2007), and even less preparation for teaching ESL nursing students, it is very clear that nurse educators are woefully underprepared for the current challenges of teaching nursing in today's diverse classroom.

Figure 4.1

Demographics: ESL nursing student population

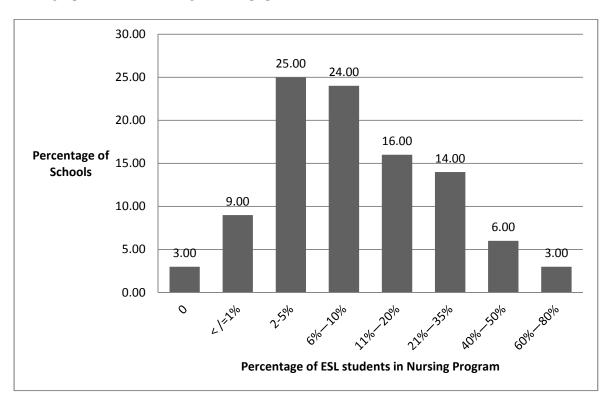


Table 4.3

Demographics: Specific Training for Teaching ESL Students

	n	%	
No Training	242	56.7	
Formal Training	18	4.2	
Informal Training	167	39.1	
Total	427	100.0	

Demographics: Cultural/Linguistic Diverse Activities

This survey requested that nurse educator participants provide information regarding their diverse cultural and linguistic experiences (Table 4.4). Eighty percent (80%) reported having at least one of the cultural or linguistic life experiences, with a large majority of them having traveled abroad at some point. Additionally, 37% of the participants reported having multiple types of diverse cultural experiences, including traveling abroad, studying or living abroad, hosting a foreign exchange student or living in a linguistically diverse community. Although 38% of the nurse educators reported having limited experience with learning or speaking a foreign language, almost 50% reported having studied a foreign language; 9% reported speaking a foreign language; and 3% identified having English as a language in addition to their native language.

Since there was no information found either in the literature or in the governmental or educational reporting agencies regarding the above attributes of nursing educators, comparisons with the general population of nurse educators should be made with caution. It must be considered that these nurse educators may not represent the general population because of the self-selection nature of the survey.

Table 4.4

Demographics: Cultural/Linguistic Diverse Activities

Cultural/Linguistic Diverse Activities	n	%
No answer	67	15.0
Travel abroad	129	29.4
Studied/lived abroad	38	8.6
Hosted foreign exchange student	8	1.8
Live/d diverse neighborhood	28	6.4
Travel abroad and hosted foreign exchange student	27	6.0
Travel abroad and live(d) in linguistically diverse neighborhood	72	16.3
Travel abroad and two others (lived/studied, hosted, live(d) diverse)	38	8.6
Travel abroad and three others (lived/studied, hosted, live(d) diverse)	35	7.9
Total	442	100
Experience with foreign language	n	%
Limited experience	160	38.0
Studied foreign	209	49.6
Speak foreign	40	9.5
Nurse educator is ESL	12	2.9
Total	421	100

# Research Question 1

The first research question, "What are the instructional strategies nurse educators use when teaching ESL nursing students?," was addressed through 20 specific questions by which the nurse educator participants identified how often they used a particular instructional strategy on a four-point, Likert like scale from "not usually" to "all of the time." Descriptive statistics were used to answer this question, and Table 4.5 lists the results for each strategy with both the frequency and percentages of responses.

Although multivariate factor analysis of the results from the pilot study regarding the instructional strategies used did not converge on the projected themes of general supportive activities, support for language development, and teaching strategies, use of

these themes in the data analysis from the national NEABIS survey results provides a framework for evaluation.

Table 4.5

Descriptive Statistics of Instructional Strategies

Frequ	iency	Not	Some-	Most of the	All of the	Total
		Usually	times	Time	Time	
I make an effort to connect with ESL	n	15	70	231	120	436
nursing students on a personal level.	%	3.4	16.1	53.0	27.5	
I use stories, case studies, or scenarios to	n	17	81	207	127	432
provide context for what I am teaching as an aid for ESL nursing students.	%	3.9	18.8	47.9	29.4	
I make an effort to pair native English-	n	108	127	125	70	430
speaking nursing students with ESL nursing students during learning activities.	%	25.1	29.5	29.1	16.3	
During learning activities I provide ESL	n	10	20	200	198	428
nursing students with clear directions and expectations.	%	2.3%	4.7%	46.7%	46.3%	
ESL nursing students are provided with	n	130	112	113	73	428
informal assessments to evaluate their learning during my course.	%	30.4%	26.2%	26.4%	17.1%	
I help ESL nursing students access school	n	42	86	151	146	425
resources.	%	9.9	20.2	35.5	34.4	
ESL nursing students are encouraged to	n	219	89	60	61	429
use translators or bilingual dictionaries in my course.	%	51.0	20.7	14.0	14.2	
I encourage ESL nursing students to learn	n	306	75	35	14	430
about the nursing content in their native language.	%	71.2	17.4	8.1	3.3	
I allow ESL nursing students extra time for	n	87	140	150	54	431
thinking and processing when I interact with them in my course.	%	20.2	32.5	34.8	12.2	
I help ESL nursing students prioritize key	n	34	121	192	81	428
elements of learning activities.	%	7.9	28.3	44.9	18.9	
I strive to support ESL nursing students by	'n	0	11	161	255	427
making the learning environment inclusive and accepting.	%	0	2.6	37.7	59.7	
When there are ESL nursing students	n	36	83	193	112	424
listening to me, I make an effort to speak more slowly and clearly.	%	8.5	19.6	45.5	26.4	
Before teaching activities I provide	n	320	52	34	18	424
vocabulary lists specific to the course to ESL nursing students.	%	75.5	12.3	8.0	4.2	

Table 4.5 (cont.)

Freque	Frequency		Some- times	Most of the Time	All of the Time	Total
I use some type of graphic organizer aid	n	105	145	123	50	423
when teaching ESL nursing students.	%	24.8	34.3	29.1	11.8	
I avoid using idioms and other colloquial	n	64	164	169	27	424
expressions in my teaching activities when I have ESL nursing students.	%	15.1	38.7	39.9	6.4	
I structure learning activities so ESL	n	99	105	153	63	422
nursing students have opportunities to practice speaking English in a healthcare context.	%	23.5	24.9	36.3	15.4	
I recommend additional resources to ESL	n	48	115	135	125	423
nursing students to support their understanding of the nursing content.	%	11.3	27.2	31.9	29.6	
Exam questions are evaluated for linguistic	n	190	94	85	50	419
bias before they are given to the ESL nursing student in my courses.	%	45.3	22.4	20.3	11.9	
I provide extra time for ESL nursing	n	244	69	45	60	418
students to complete exams.	%	58.4	16.5	10.8	14.4	
I have an open-door office policy, and I	n	6	13	54	348	421
encourage ESL nursing students to come to see me.	%	1.4	3.1	12.8	82.7	

# General supportive activities

Overall, the nurse educators reported using many of the supportive activities, including helping the ESL nursing students to identify resources, as well as making a concerted effort to create a welcoming learning environment for them. Table 4.6 highlights these five specific instructional strategies that fall in the category of general supportive activities and the percentage of time nurse educators reported using them most or all of the time.

It was not surprising that a very large majority of the nurse educators provide a supportive environment — this reflects the caring component of nursing education. More than 97% of the nurse educators reported making a concerted effort to create an inclusive and accepting learning environment; 95% described having an open-door policy and

encouraging ESL nursing students to see them; and 80% reported trying to connect with the ESL nursing student on a personal level. According to Coyle-Rogers and Cramer (2005), a positive learning environment often starts "with the educators caring enough to recognize in the student a need for supportive assistance" and continues with "supportive guidance as one of the most prevalently used caring behaviors" (p. 164). Again, these caring behaviors are not unusual for a nurse educator because caring is a foundational concept in the discipline of nursing. This caring environment allows ESL nursing students to feel safe as they explore and learn the nuances of the discipline of nursing and the nursing language.

Table 4.6

Nurse Educator Use of Supportive Instructional Strategies

Instructional Strategy	Percent Reporting Most or All of the Time
I make an effort to connect with ESL nursing students on a personal level.	80.5
I strive to support ESL nursing students by making the learning environment inclusive and accepting.	97.4
I have an open-door office policy, and I encourage ESL nursing students to come see me.	95.5
I recommend additional resources to ESL nursing students to support their understanding of the nursing content.	61.5
I help ESL nursing students access school resources.	63.8

# Support for language development

The picture was less positive when evaluating how nurse educators use the five strategies listed that are aimed at supporting the ESL nursing student in language development. Very few of the nurse educators reported using these strategies all of the

time. Two strategies were used some or most of the time, and three strategies were used only some of the time or not usually used. Table 4.7 highlights these five specific instructional strategies specific to supporting ESL nursing students' language development and the percentage of time that nurse educators reported using them.

Table 4.7

Nurse Educator Use of Instructional Strategies in Support of Language Development

Instructional Strategy	Percent Reporting Sometimes or Most of the Time
I avoid using idioms and other colloquial expressions in my teaching activities when I have ESL nursing students.	78.6
I structure learning activities so ESL nursing students have opportunities to practice speaking English in a healthcare context.	61.2
	Percent Reporting Not Usually or Sometimes
I make an effort to pair native English speaking nursing students with ESL nursing students during learning activities.	54.6
ESL nursing students are encouraged to use translators or bilingual dictionaries in my course.	71.8
Exam questions are evaluated for linguistic bias before they are given to the ESL nursing student in my courses.	67.7

Nurse educators work to make the learning environment caring and supportive; however, many of the specific strategies aimed at helping the ESL nursing student develop his or her English language skills were not used on a regular basis by the majority of nurse educators who participated in this study. As an example, nurse educators did not make efforts to specifically pair the ESL nursing student with a native English-speaking student during learning activities. It may be, however, that nurse educators simply do not routinely make learning group or pair assignments in the

educational setting. It is common practice in nursing education to allow for self-selection into groups. Although self-selection allows for independent learning, it is common for students to assemble into groups of like students, which does not promote ESL nursing students interacting with native English-speaking students. Consequently, ESL nursing students must rely on the nurse educator to intervene and advocate for the ESL nursing student by deliberately assigning mixed language ability groups. Unfortunately since the majority of nurse educators have neither formal nor informal training on teaching ESL nursing students, they are not prepared to advocate for these ESL nursing students nor use teaching strategies that would facilitate ESL nursing students developing their language skills.

## **Teaching Strategies**

Most of the instructional strategies related to the 10 teaching strategies identified as specifically important when teaching ESL nursing students were identified as not usually being used or only being used sometimes. Again, this is an expected result since nurse educator preparation rarely includes instruction in teaching ESL nursing students. It was interesting to note that a majority of nurse educators reported using four of the instructional strategies most or all of the time. However, the specific teaching strategies nurse educators used more frequently were related to how they provide information. The nurse educators reported using clear directions, speaking slowly and clearly, providing context for the teaching content, and helping the students prioritize the information. While these are important, they are also common teaching strategies that are not specific to ESL nursing students. The significant teaching strategy of allowing ESL nursing

students extra time to think and process information either during learning activities or during exams was seldom identified as being used by these nurse educators.

Additionally, neither informal assessments nor graphic organizers were used regularly; nurse educators did not provide vocabulary lists, nor did they encourage the ESL nursing student to learn about the content in his or her native language very often. Table 4.8 demonstrates that many of the identified teaching strategies specifically aimed at benefitting ESL nursing students are not being used on a regular basis by nurse educators. Although these beneficial teaching strategies have consistently been evident in the nursing literature for over a two decades (Shearer,1989; Phillips & Hartley, 1990; Kurz,1993; Kataoka-Yahiro & Abriam-Yago,1997; Abriam-Yago, Yoder & Kataoka-Yahiro, 1999; Klisch, 2000; Yoder, 2001; Williams & Calvillo, 2002; Pardue & Hass, 2003; Flinn,2004; Choi, 2005; Caputi, Engelmann & Stasinopoulos, 2006; Lujan, 2008; Hussin, 2009), this research demonstrates that there is an apparent gap in the transmission of this critical information to those nurse educators who need it most.

Table 4.8

Nurse Educator Use of Instructional Strategies for Teaching

Instructional Strategy	Percent Reporting Most of the Time or All of the Time
I use stories, case studies, or scenarios to provide context for what I am teaching as an aid for ESL nursing students.	77.3
During learning activities I provide ESL nursing students with clear directions and expectations.	93.0
I help ESL nursing students prioritize key elements of learning activities.	63.8
When there are ESL nursing students listening to me I make an effort to speak more slowly and clearly.	71.9

Table 4.8 (cont.)

Instructional Strategy	Percent Reporting Not Usually or Sometimes
ESL nursing students are provided with informal assessments to evaluate their learning during my course.	56.6
I encourage ESL nursing students to learn about the nursing content in their native language.	88.6
I allow ESL nursing students extra time for thinking and processing when I interact with them in my course.	52.7
I provide extra time for ESL nursing students to complete exams.	74.9
I use some type of graphic organizer aid when teaching ESL nursing students.	59.1
Before teaching activities I provide vocabulary lists specific to the course to ESL nursing students.	87.8

# Summary analysis for research question #1

Entering into a nursing program brings new challenges for all students. Not only is the nursing language a discipline-specific language (Hussin, 2002) that all nursing students need to learn, the science-based discipline of nursing also requires all nursing students learn new concepts in a new context. Therefore, it was reassuring to learn that a majority of nurse educators in this research study use good basic teaching strategies that benefit all students, such as giving clear directions, speaking slowly and clearly, providing context for the content, and helping students prioritize information. It is important to point out, however, that although these teaching strategies can be considered as a "nice to have" for the traditional U.S. educated nursing student, they are a "need to have" for the ESL nursing student. Traditional non-ESL nursing students have grown up with and have a familiarity with the typical classroom discourse (Corson, 2001) and have learned how to navigate the learning environment. ESL nursing students do not have this

inherent advantage and require that nurse educators regularly use specific teaching strategies aimed at the ESL nursing student needs to support their success.

Even if nurse educators are aware of important strategies for teaching ESL nursing students, the culture of nursing education contains many formal and informal policies and procedures that dictate some of the practices nurse educators use, which may hinder their ability to implement instructional strategies that would be beneficial to the ESL nursing student. It was not surprising to learn that nearly 72% of the nurse educators do not encourage ESL nursing students to use translators or bilingual dictionaries. Nursing students are usually not allowed to use any device during quizzes or exams, and so it follows that nurse educators may have an aversion to encouraging students to rely on something they cannot use in the testing environment. Evaluation in nursing education centers on testing, and getting nursing students ready to pass the exams has a high priority in nursing education. This researcher has heard many nurse educators state that ESL nursing students need to be able to do what all nursing students do. Although this is an accurate sentiment, what nurse educators fail to recognize is that to get the ESL nursing student to the place that all nursing students need to be requires different teaching and learning strategies. Clearly, there is a lack of understanding that using a bilingual dictionary or translator in the classroom is a learning aid that will help the ESL nursing student develop language skills, and using it in the classroom learning environment does not then require that it also be used in the testing environment.

Another crucial instructional strategy that few nurse educators use is the review of test items for linguistic bias. Many of the questions on nursing exams are written with complex language structures and vocabulary unfamiliar to many ESL nursing students

(Bosher & Bowles, 2008). The complexity of the questions is aimed at making the questions more rigorous and discriminatory with the intent of improving the ability of the test question to evaluate a nursing student's understanding and application of the content. However, because of the complex English vocabulary and use of idioms or colloquialisms, ESL nursing students have difficulty understanding what the question is asking. Because 'passing the test' is a requirement for nursing students to advance from one course to the next, there is rightfully a very high value placed on testing by both the nursing student and the nurse educator. There are many traditions and expected practices that surround writing test questions, and it is not a common practice for nurse educators to have someone else review test questions. It is a common understanding that the faculty member who teaches the content knows what he or she has taught and, therefore, is the person who has the best understanding of what are good test questions to evaluate student learning. Additionally, if the review of questions occurs, it centers on the content of the question, not the language involved in the question. Therefore, it was not surprising that nearly 68% of the nurse educators reported that reviewing questions for linguistic bias was not a frequent occurrence. Because test questions are not routinely evaluated for language content or linguistic bias, the ESL nursing student may be put into a precarious position since the test may be evaluating the ESL nursing students' language ability instead of their understanding of nursing.

The last example of an instructional strategy that is not commonly used due to institutional barriers is related to time allocation for examinations. To be able to understand nursing exam questions, ESL nursing students frequently read and re-read the test questions, which means they spend more time per question than the traditional native

English-speaking nursing student. There has been a tradition in nursing education that each test question should have about one minute allocated for completion, and this time limit is usually adequate for the student who easily understands the English language; however, many ESL nursing students are challenged with first understanding the complex language to determine what the question is asking before then going on to answer the question. Therefore, many ESL nursing students require more time to complete a nursing exam. However, nursing exams are timed, and the time limits are strictly enforced by policies and procedures, as evidenced by the responses that nearly 76% of the nurse educators do not provide extra time for ESL nursing students to complete exams. It is interesting to note that the National Council of State Boards of Nursing (NCSBN), which administers the national exam for nursing licensure (NCLEX-RN), allows for a pace of 1.3 minutes per question (NCSBN, 2011). These results demonstrate that the majority of nursing programs have not modified their manner of examinations to reflect the practices used by the NCSBN.

### Research Question 2

"What beliefs do nurse educators hold about ESL nursing students?" was addressed through the 16 specific questions that asked the nurse educator participants to identify their agreement with statements on a five-point Likert-like scale from "strongly disagree" to "strongly agree." The pilot study analysis of the survey tool (see chapter 3) resulted in identification of four domains of the nurse educators' beliefs related to teaching the ESL nursing student: (A) the ESL nursing student's impact on the learning environment, (B) the impact of English language difference on the individual ESL

nursing student, (C) the impact of the ESL nursing student on teaching, and (D) general beliefs about the ESL nursing student. The four domains constitute the four subscales of the NEABIS survey tool and are discussed separately with specific data reported in Tables 4.10 to 4.13. This research question was answered using descriptive statistics.

Subscale A: Nurse Educators' Beliefs about the ESL nursing student's impact on the learning environment

Generally speaking, nursing educators do not believe ESL nursing students are detrimental to the overall learning environment. Subscale A (Table 4.9) on the Beliefs scale had statements that clustered together and related to the concept of the ESL nursing student's impact on the learning environment. A large majority (89%) of the nursed educators did not believe that their teaching is hampered by the presence of ESL nursing students. Additionally, the majority of nurse educators (86%) reported that they do not believe the presence of ESL nursing students is detrimental to other students' learning.

Subscale A: Nurse Educators' Beliefs about the ESL nursing student's impact on the learning environment

Table 4.9

		Strongly Disagree	Dis- agree	Not Sure	Agree	Strongly Agree	Total n
ESL nursing students often use their language deficits as an excuse for not doing	n	92	190	85	53	13	433
well in the nursing program.	%	21.2	43.9	19.6	12.2	3.0	
Having ESL nursing students in the	n	206	173	32	20	8	439
classroom/lab/clinical setting is detrimental to the learning of the other students.	%	46.9	39.4	7.3	4.6	1.8	

Table 4.9 (cont.)

		Strongly Disagree	Dis- agree	Not Sure	Agree	Strongly Agree	Total n
ESL nursing students who are able to converse well in English should also be	n	22	181	97	110	21	431
able to read and write at the same level.	%	5.1	42.0	22.5	25.5	4.9	
Teaching in the lab/classroom/clinical	n	188	198	29	14	3	432
setting is hampered by the presence of ESL nursing students.	%	43.5	45.8	6.7	3.2	0.7	

Subscale B: Beliefs about the impact of English language difference on the individual ESL nursing student

Subscale B (Table 4.10) on the Beliefs scale contained statements related to the impact of the English language difference on the individual ESL nursing student. The average score for this subscale was 2.90, which indicates that on average nurse educators are not sure if language differences impact the ESL nursing student's learning; however, nearly 73% report they believe the ESL nursing student's academic challenges are related to language challenges. It was also interesting to note that even though 70% of the nurse educators believe the ESL nursing student invests sufficient time to prepare for the learning experiences, the majority (68%) either were not sure if or believed that English language differences hinder the ESL nursing student from gaining what is needed from the learning experience. Clearly, nurse educators had concerns about the ESL nursing students' ability to fully access the learning experiences provided to them as a result of language barriers that include not only student understanding but also the nurse educator inability to adequately convey what needs to be learned.

Table 4.10

Subscale B: Beliefs about the impact of English language difference on the individual ESL nursing student

		Strongly Disagree	Dis- agree	Not Sure	Agree	Strongly Agree	Total n
ESL nursing students are frequently lost or behind in	n	51	211	70	93	14	439
the coursework.	%	11.6	48.1	15.9	21.2	3.2	
Most ESL nursing students have difficulty in nursing programs due to their	n	121	195	73	35	11	435
academic deficits that are not related to language challenges.	%	27.8	44.8	16.8	8.0	2.5	
ESL nursing students invest sufficient time and effort into	n	3	26	100	219	83	421
preparation for their learning experiences.	%	0.7	6.0	23.2	50.8	19.3	
English language deficits hinder ESL nursing	n	21	115	121	142	32	431
students from gaining what they need from their learning experiences.	%	4.9	26.7	28.1	32.9	7.4	

Subscale C: Beliefs about the impact of the ESL nursing student on teaching

When considering the relationship between ESL nursing students and teaching, nurse educators reported they generally did not believe that the ESL nursing student had a negative impact on their teaching. Subscale C (Table 4.11) of the Beliefs scale investigated this area, and for the most part, nurse educators (75%) did not believe ESL nursing students were difficult to teach, nor did nurse educators (65%) believe they had difficulty assessing the competencies of ESL nursing students. However, of note, nearly half (49%) of the nurse educators question if they are an effective educator or they reported that they believe that they are not an effective educator when it comes to

teaching ESL nursing students. Unfortunately this again was an expected finding since the nurse educators in this survey reported that they had received little to no education related to teaching the ESL nursing student.

Table 4.11

Subscale C: Beliefs about the impact of the ESL nursing student on teaching

		Strongly Disagree	Dis- agree	Not Sure	Agree	Strongly Agree	Total
I frequently feel I am not an effective educator when it	n	56	163	115	89	9	432
comes to teaching ESL nursing students.	%	13.0	37.7	26.6	20.6	2.1	
Because of English language deficits, I have	n	72	213	56	83	15	439
difficulty assessing ESL nursing students' competencies.	%	16.4	48.5	12.8	18.9	3.4	
ESL nursing students are	n	103	229	48	52	7	439
difficult to teach.	%	23.5	52.2	10.9	11.8	1.6	

Subscale D: General beliefs about the ESL nursing student and teaching

Overall, according to the results for subscale D (Table 4.12) of the Beliefs scale, which measured general beliefs that nurse educators hold about the ESL nursing student, nurse educators overwhelmingly had positive general beliefs about the ESL nursing student. The majority (88%) agreed ESL nursing students could succeed in nursing programs despite their English language challenges, and most nurse educators (70%) believed learning for all students was enhanced by the presence of ESL nursing students. Additionally, an overwhelming majority (93%) showed they value the ESL nursing student through their beliefs that it is important to pronounce the ESL nursing student's name correctly to demonstrate inclusion. These nurse educators believed that it is

important to learn about ESL nursing students' personal experiences (88%) that shaped their learning, and nurse educators recognized that they need to learn more about how to teach ESL nursing students (86%). These findings are further evidence and support that overall nurse educators regard ESL nursing students positively.

Table 4.12

Subscale D: General beliefs about the ESL nursing students and teaching

		Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	Total
Learning for all students is enhanced by the	n	5	30	92	200	105	432
presence of ESL nursing students.	%	1.2	6.9	21.3	46.3	24.3	
Pronouncing ESL nursing students'	n	4	8	17	189	219	437
names correctly is important to demonstrate inclusion.	%	0.9	1.8	3.9	43.2	50.1	
Even though I am an experienced nursing educator, I need to	n	6	18	38	226	147	435
learn more about how to teach ESL nursing students.	%	1.4	4.1	8.7	52.0	33.8	
It is important for me to learn about the ESL nursing students'	n	0	14	40	232	152	438
experiences that have shaped their learning.	%	0	3.2	9.1	53.0	34.7	
Even when they have English language deficiencies, ESL	n	5	15	32	210	180	442
nursing students can still succeed in nursing coursework.	%	1.1	3.4	7.2	47.5	40.7	

Summary analysis for research question #2

The results of the NEABIS survey supported that nurse educators, overall, have positive general beliefs about the ESL nursing student. Additionally, nurse educators did not believe ESL nursing students are detrimental to either the learning environment or to the learning of other students, and more importantly, nurse educators believed learning for all students is enhanced by the presence of ESL nursing students. These general views about ESL nursing students in the learning environment are encouraging because teacher personal beliefs influence their classroom teaching practices (Wilkins, 2008). Perhaps more insight on the lack of equity in success for ESL nursing students can be derived from considering the specific views of nurse educators about ESL nursing students related to language differences because teacher personal beliefs also shape their expectations of students (Snider & Roehl, 2007).

Nurse educators in this study believed language differences have an impact on the individual ESL nursing student. A large number of these nurse educators believed that English language deficits hinder the ESL nursing student from gaining what is needed from the learning experience and that the ESL nursing students' academic challenges are related to language challenges. It is interesting to note, however, that nurse educators overwhelmingly agreed ESL nursing students can succeed in nursing programs despite their English language challenges. Because these findings are centered specifically on what the nurse educators believe about what ESL nursing students do or can do, the findings related to specific nurse educator beliefs on teaching ESL nursing students should be considered.

It was interesting to note that these research findings did not support what was presented in the literature concerning the frustrations voiced by nurse educators (Caputi, Engelmann, & Stasinopoulos, 2006; Carter & Xu, 2007; Starr, 2009). The majority of nurse educators in this research reported they do not believe ESL nursing students are difficult to teach, nor did they believe they have difficulty assessing the competency of the ESL nursing student. However, in contrast, almost 50% of the nurse educators in this study reported they are not sure if they are effective educators in relation to teaching ESL nursing students. Additionally, these nurse educators reported overwhelming that they believed they need to learn more about how to teach ESL nursing students. The context of the nursing education environment offers insight.

Many nursing education classrooms continue in the traditional format in which the expert teacher delivers content via lecture to many students in a large classroom (Bartels, 2007). Although this method of teaching has a strong tradition in higher education, and it continues in nursing education partly because of the shortage of nurse faculty, it is not an environment that encourages nursing students to interact. Because ESL nursing students are part of the larger group, and many ESL nursing students remain quiet in the classroom setting to avoid being different because of their accent (Omeri, Malcolm, Ahern, & Wellington, 2003), it is logical that nurse educators may not think ESL nursing students are hard to teach because they blend into the group as a whole.

Secondly, the nurse educator's evaluation of an ESL nursing student's competency is completed via evaluation of the completion of tasks related to providing nursing care in the form of skill check-offs that are the same for all nursing students.

Additionally, the majority of evaluation in nursing education is completed by "objective"

testing via examinations. These examinations are integral to assessing all nursing students, and there is no differentiation in evaluations between traditional English-speaking nursing students and ESL nursing students based on these tests. So it is natural for nurse educators to report they did not have difficulty in assessing ESL nursing students' competency; students' competencies are judged by examinations that are objective and impersonal, or skills based – and nurse educators are nurse experts who believe that they are fully competent to evaluate these clinical aspects of nursing.

Despite nurse educators' positive beliefs about their own personal competency to adequately evaluate ESL nursing students, the majority of nurse educators question their effectiveness in teaching ESL nursing students. An explanation for these findings can be found in the evidence that ESL nursing students have a higher failure rate on examinations when compared with non-ESL students. Being successful on a nursing exam is considered to be an indication that learning has taken place, and poor outcomes by ESL nursing students on examinations indicate to nurse educators that these students are not learning what they need to be successful. If nurse educators believe that ESL nursing students can succeed in nursing programs despite their English language challenges, but they are still not successful, it is most appropriate that these nurse educators question their preparation and ability to adequately teach ESL nursing students. The apparent question that surfaces in the context of these findings is why nurse educators have not availed themselves of the educational materials available in the nursing literature related to teaching ESL nursing students. Although information has been available to nurse educators that would assist them in developing better teaching practices, it is apparent that the nurse educators in this study did not access or use this

information. Perhaps this is indication of the lack of identity as an educator – what time the nurse educator has for continuing education centers on maintaining clinical expertise and not educator expertise. It is unfortunate that nurse educators believe that ESL nursing students can be successful but fail to provide conditions that would facilitate this success.

### Research Question 3

To answer research question three, "What is the relationship between the beliefs that nurse educators hold about ESL nursing students and the instructional strategies they use when teaching these students?," statistical analysis of the data collected by the NEABIS survey were evaluated using the Spearman rho method. The use of instructional strategies was measured using the 20-item ordinal scale of instructional strategies contained in the NEABIS survey, and beliefs were measured by the subscales of the 16 ordinal scales contained in the NEABIS survey. Using the Spearman rho correlation coefficient, each subscale of the beliefs scale was independently evaluated. Table 4.13 presents the Spearman rho coefficients and the significant of each.

Table 4.13

Instructional Strategies and Subscales of Beliefs Scale: Spearman's Rho Analysis

n= 442	Correlation Coefficient (r)	Sig. (1-tailed)
Instructional Strategies/Beliefs Subscale A	095 <sup>*</sup>	.023
Instructional Strategies/Beliefs Subscale B	102*	.016
Instructional Strategies/Beliefs Subscale C	093*	.026
Instructional Strategies/Beliefs Subscale D	.347**	.000

<sup>\*</sup>Correlation is significant at the  $p \le 0.05$  level (1-tailed).

<sup>\*\*</sup>Correlation is significant at the  $p \le 0.01$  level (1-tailed).

The data analysis of subscale A revealed that, although weak (r = -.095), there was a statistically significant (p = 0.023) inverse relationship between the nurse educator's belief about the impact the ESL nursing student has on the learning environment and the instructional strategies the nurse educator uses. Subscale A of the Beliefs scale was a negatively formatted scale: a higher score indicated the nurse educator believed the ESL nursing student had a negative impact on the learning environment. Teachers who believed ESL nursing students had a negative impact on the learning environment tended to use fewer of the instructional strategies identified as being helpful for these students.

The data analysis of subscale B also revealed there was a weak (r =-.102) but statistically significant (p=-.016) inverse relationship between the nurse educator's belief about how ESL students' language difference impacts their learning and use of instructional strategies. Subscale B of the Beliefs scale was a negatively formatted scale: A higher score indicated the nurse educator believed ESL nursing students' language difference has a negative impact on them. Teachers who believe language differences have a negative impact on ESL nursing students tend to use fewer of the instructional strategies identified as being helpful for these students.

Data analysis of subscale C again revealed there was a weak (r =-.093) but statistically significant (p=-.026) inverse relationship between the nurse educator's belief about the ESL students impact on teaching and use of instructional strategies. Subscale C of the Beliefs scale was a negatively formatted scale: A higher score indicated the nurse educator believed the ESL nursing student had a negative impact on teaching. Teachers who believe ESL nursing students have a negative impact on teaching tend to use fewer of the instructional strategies identified as being helpful for these students.

Subscale D of the Beliefs scale was a positively formatted scale: A higher score indicated the nurse educator had more general positive beliefs regarding the ESL nursing student. Data analysis of subscale D showed there is a moderate (r =.347) positive correlation between the nurse educator's general positive beliefs about ESL nursing students and the frequency that the nurse educator uses instructional strategies identified as being helpful for these students. This finding was statistically significant at the  $p \le 0.01$  level with a p value of .000. Nurse educators who have generally positive beliefs regarding ESL nursing students tend to use more of the instructional strategies identified as being helpful for these students.

# Summary analysis for research question #3

It has been established that teachers' beliefs guide their practices (Parajes, 1992; Park, Lee, & Oliver, 2006; Snider, 2007; Isikoglu, 2008; Wilkins 2008, Cross, 2009; Gatt, 2009). The findings of this research supported that relationship: nurse educators who believed ESL nursing students have a negative impact on teaching and the learning environment tended to use fewer instructional strategies identified as being helpful. Additionally, teachers who believe language differences have a negative impact on ESL nursing students tend to use fewer of the instructional strategies that would be helpful for these students. In contrast, nurse educators' positive general beliefs about ESL nursing students were positively correlated with increased use of the instructional strategies most beneficial to these students.

### Research Question 4

To answer research question four, "What is the relationship between nurse educators' background attributes and the beliefs they hold about ESL nursing students?," stepwise multiple linear regression analysis was used. The independent (predictor) variables of (1) level of education as a nurse educator, (2) years teaching as a nurse educator, (3) years teaching ESL nursing students, (4) experience with other languages, (5) life experiences with cultural and linguistic diversity, and (6) training (formal or informal) to teach ESL students were used to evaluate their contribution to predicting the beliefs nurse educators have related to ESL nursing students. Each subscale on the Beliefs scale was evaluated separately.

#### Subscale A Results

The regression analysis for subscale A revealed two of the independent (predictor) variables reached the level of significance required to be evaluated for their predictive contribution to the dependent (outcome) variable of beliefs about the impact of the ESL nursing student on the learning environment. Table 4.14 shows that having traveled abroad (one of the life experiences with cultural and linguistic diversity) and having a level of education at the baccalaureate level accounted for 4% ( $R^2$ ) of the variation in beliefs about the impact of the ESL nursing student on the learning environment, and this model is statistically significant at the  $p \le 0.05$  level. The adjusted  $R^2$  shows cross validity is very good, and the model is generalizable to the general population of nurse educators. The Durbin-Watson value shows the assumptions of the

model have been met, and errors in regression are independent. A summary of the regression coefficients indicated that having traveled abroad (one of the life experiences with cultural and linguistic diversity) or having a level of education at the baccalaureate level were significant contributors to the model. Beliefs about the impact of the ESL nursing student on the learning environment score increased when a nurse educator reported having an education level at the baccalaureate level and decreased when reporting having traveled abroad.

The Pearson correlation shows there was an inverse relationship between the independent variable (predictor) of having traveled abroad and beliefs about the impact of the ESL nursing student on the learning environment. The Pearson correlation also showed there was a positive relationship between the nurse educator who has a bachelor of science degree in nursing and beliefs about the impact of the ESL nursing student on the learning environment. Subscale A of the Beliefs scale was a negatively formatted scale: A higher score indicated the nurse educator believed the ESL nursing student had a negative impact on the learning environment. It can be concluded from this regression analysis that nurse educators who only have an education level at the baccalaureate level believe ESL nursing students have a negative impact on the learning environment, and nurse educators who have traveled abroad do not believe ESL nursing students have a negative impact on the learning environment. None of the other independent (predictor) variables under study had a significant impact on the nurse educators' beliefs regarding the impact of the ESL nursing student on the learning environment.

Table 4.14

Nurse Educator Attributes Impacting Beliefs Subscale A

	Model Summary for Subscale A									
Std. Change Statistics										
			Adjusted	Error of	R					
		R	R	the	Square	F			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.162ª	.026	.024	2.599	.026	9.704	1	358	.002*	
2	.203 <sup>b</sup>	.041	.036	2.583	.015	5.472	1	357	.020*	1.810

- a. Predictors: (Constant), Traveled Abroad
- b. Predictors: (Constant), Traveled Abroad, Education LEVEL BSN
- c. Dependent Variable: SCALE A Score

Pearson Correlation

SCALE A Score Sig. (1-tailed)

Education LEVEL BSN .149 .002\*

Traveled Abroad -.162 .001\*

	Coefficients										
		Unstand Coeffi		Standardized Coefficients							
Model		В	Std. Error	Beta	t	Sig.					
1	(Constant)	9.226	.270		34.231	.000					
	Traveled Abroad	975	.313	162	-3.115	.002*					
2	(Constant)	9.057	.277		32.647	.000					
	Traveled Abroad	841	.316	140	-2.660	.008*					
	Education LEVEL BSN	1.571	.672	.123	2.339	.020*					

n=442

\*Correlation is significant at the  $p \le 0.05$  level.

### Subscale B Results

The regression analysis for subscale B was conducted in the same stepwise method as for all other subscales; however, the analysis did not reveal any significant findings. None of the independent (predictor) variables identified [level of education as a nurse educator, years teaching as a nurse educator, years teaching ESL nursing students,

experience with other languages, life experiences with cultural and linguistic diversity, and training (formal/informal) to teach ESL students] formed a model that allowed for predicting the dependent (outcome) variable of beliefs about the impact of difference in language on the individual ESL nursing student.

#### Subscale C Results

The regression analysis for subscale C revealed only one of the independent (predictor) variables reached the level of significance required to be evaluated for its predictive contribution to the dependent (outcome) variable of beliefs about the impact of the ESL nursing student on teaching. Table 4.15 shows that having a background in studying or speaking a foreign language accounted for 2.4% ( $R^2$ ) of the variation in beliefs about the impact of the ESL nursing student on teaching, and this model was statistically significant at the  $p \le 0.05$  level. The adjusted  $R^2$  shows cross validity is very good, and the model is generalizable to the general population of nurse educators. The Durbin-Watson value showed the assumptions of the model have been met, and errors in regression are independent. A summary of the regression coefficients indicated that having a background in studying or speaking a foreign language was a significant contributor to the model. The beliefs about the impact of the ESL nursing student on teaching score decreased when a nurse educator reported having a background in studying or speaking a foreign language.

The Pearson correlation showed there was an inverse relationship between the independent variable (predictor) of having a background in studying or speaking a foreign language and beliefs about the impact of the ESL nursing student on teaching.

Subscale C of the Beliefs scale was a negatively formatted scale: A higher score indicated the nurse educator believed the ESL nursing student had a negative impact on teaching. It can be concluded from this regression analysis that nurse educators who have a background in studying or speaking a foreign language did not believe ESL nursing students have a negative impact on teaching. None of the other independent (predictor) variables under study had a significant impact on the nurse educators' beliefs regarding the impact of the ESL nursing student on teaching.

Table 4.15

Nurse Educator Attributes Impacting Beliefs Subscale C

-	Model Summary for Subscale C									
Std. Change S						Stati	stics			
			Adjusted	Error of	R					
		R	R	the	Square	F			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.155ª	.024	.021	2.357	.024	8.765	1	358	.003*	1.856

a. Predictors: (Constant), Language Experience Study or Speak

b. Dependent Variable: SCALE C SCORE

Pearson Correlation						
·	SCALE C Score	Sig. (1-tailed)				
Language Experience Study or Speak	155	.002*				

			Coefficier	nts		
		Unstand Coeffic		Standardized Coefficients		
Мо	odel	В	Std. Error	Beta	t	Sig.
1	(Constant)	7.667	.198		38.626	.000
Language Experience Study or Speak		753	.254	155	-2.961	.003*

n = 442

<sup>\*</sup>Correlation is significant at the  $p \le 0.05$  level

#### Subscale D Results

The regression analysis for subscale D revealed two of the independent (predictor) variables reached the level of significance required to be evaluated for their predictive contribution to the dependent (outcome) variable of general beliefs about the ESL nursing student. Table 4.16 shows that training (formal or informal) to teach ESL students and having studied or lived abroad accounted for 3.8% ( $R^2$ ) of the variation in beliefs about the ESL nursing student in general, and this model was statistically significant at the  $p \le 0.05$  level. The adjusted  $R^2$  shows cross validity is very good, and the model is generalizable to the general population of nurse educators. The Durbin-Watson value shows the assumptions of the model have been met, and errors in regression are independent. A summary of the regression coefficients indicates training (formal or informal) to teach ESL students and having studied or lived abroad were significant contributors to the model. Scores regarding the general beliefs about the ESL nursing student increased when a nurse educator reported having training (formal or informal) to teach ESL students or having studied or lived abroad.

The Pearson correlation shows there was a positive relationship between the independent (predictor) variables of having training (formal or informal) to teach ESL students and having studied or lived abroad and general beliefs about the ESL nursing student. Subscale D of the Beliefs scale was a positively formatted scale: A higher score indicated the nurse educator had more positive beliefs regarding the ESL nursing student. It can be concluded from this regression analysis that nurse educators who have had training (formal or informal) to teach ESL students or have studied or lived abroad have more favorable beliefs about the ESL nursing student. None of the other independent

(predictor) variables under study had a significant impact on the nurse educators' general beliefs about the ESL nursing student.

Table 4.16

Nurse Educator Attributes Impacting Beliefs Subscale D

	Model Summary for Subscale D									
	Std.					Change	e Stat	istics		
			Adjusted	Error of	R					
		R	R	the	Square	F			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.150ª	.023	.020	2.807	.023	8.303	1	359	.004*	
2	.194 <sup>b</sup>	.038	.032	2.790	.015	5.546	1	358	.019*	1.853

- a. Predictors: (Constant), Training (informal/formal) ESL
- b. Predictors: (Constant), Training (informal/formal) ESL, Studied/Lived Abroad
- c. Dependent Variable: SCALE D SCORE

**Pearson Correlation** 

	SCALE D Score	Sig. (1-tailed)
TOTAL Training ESL	.150	.002*
Studied/Lived Abroad	.123	.010*

Coe		

		Unstand Coeffic		Standardized Coefficients		
			Std.			
Model		В	Error	Beta	t	Sig.
1	(Constant)	20.256	.195		103.811	.000
	Training (informal/formal) ESL	.861	.299	.150	2.882	.004*
2	(Constant)	20.085	.207		96.976	.000
	Training (informal/formal) ESL	.858	.297	.150	2.890	.004*
	Studied/Lived Abroad	.865	.367	.122	2.355	.019*

n = 442

<sup>\*</sup>Correlation is significant at the  $p \le 0.05$  level.

Summary analysis of research question #4

There were several background attributes that were significantly correlated with positive beliefs related to the ESL nursing student; however, there was only one background attribute that was associated with negative beliefs. Nurse educators who had the minimal amount of education to be a nursing educator [baccalaureate degree (BSN)] as a clinical nurse educator] were found to believe ESL nursing students have a negative impact on the learning environment. There are several plausible explanations for this finding. BSN nurse educators are younger and less experienced in the educational environment and may have limited experience in teaching in general, so diverse students may pose added challenges. At the BSN education level, the nurse educator may have had less preparation or continuing education related to teaching diverse nursing students and ESL students in particular. Lastly, ESL nursing students have a greater impact on the learning environment in the clinical area because they are required to interact with staff and patients. In the classroom, however, ESL nursing students are able to be quiet, passive learners, and clinical educators typically do not have classroom teaching responsibilities. For whatever reason, it is clear from this finding that less educational preparation as a nurse educator may have a detrimental impact on the ESL nursing student because negative beliefs may lead to poor teaching practices.

The encouraging results were that there were several nurse educator background attributes that were significantly correlated with positive beliefs about ESL nursing students. Nurse educators who had experiences with other languages and life experiences with cultural and linguistic diversity as well as specific training to teach ESL nursing students had more positive beliefs about the ESL nursing student. These findings were

consistent with `what was found in the literature (Garcia, 1991; Byrnes, Kiger, & Manning, 1997; Youngs & Youngs, 2001; McAllister & Irvine, 2002; Kouritzin, 2004; Ajzen & Fishbein, 2005; Commins & Miramontes, 2005; and Smith, 2008). However, this may be a "chicken and the egg" conundrum. This research did not identify if the positive beliefs are a result of the nurse educators' experiences, or if the nurse educators' underlying general worldview and beliefs prompted them to seek out the diverse life and language experiences.

## Research Question 5

To answer research question five, "What is the relationship between nurse educators' background attributes and the instructional strategies they use when teaching ESL nursing students?," stepwise multiple linear regression analysis was used. The independent (predictor) variables of level of education as a nurse educator, years teaching as a nurse educator, years teaching ESL nursing students, experience with other languages, life experiences with cultural and linguistic diversity, and training (formal or informal) to teach ESL students were used to evaluate their contribution to predicting the frequency that nurse educators use identified instructional strategies that are beneficial for ESL nursing students.

The regression analysis revealed that only one of the independent (predictor) variables reached the level of significance required to be evaluated for its predictive contribution to the dependent (outcome) variable of use of instructional strategies. Table 4.17 shows specific training (formal or informal) to teach ESL nursing students

accounted for 6.2% ( $R^2$ ) of the variation in instructional strategies used by nurse educators, and this model is statistically significant at the  $p \le 0.01$  level. The adjusted  $R^2$ shows cross validity is very good, and the model is generalizable to the general population of nurse educators. The Durbin-Watson value shows the assumptions of the model have been met, and errors in regression are independent. The Pearson correlation shows there is a moderate positive relationship between the independent variable (predictor) of training (formal or informal) to teach ESL students and the increased use of instructional strategies. A summary of the regression coefficients indicates specific training to teach ESL students was a significant contributor to the model, and the instructional strategies score increased by five points when a nurse educator reported having had training. This regression analysis indicates that nurse educators who have specific training to teach ESL students have a statistically significant increased use of instructional strategies that are beneficial for ESL nursing students. These findings support the fundamental principles of education: providing education and training to teach results in teachers using that training and education when providing instruction.

Table 4.17

Nurse Educator Attributes Impacting Instructional Strategies

Model Summary for Instructional Strategies										
Std. Change Statistics										
			Adjusted	Error of	R					
		R	R	the	Square	F			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.248ª	.062	.059	10.181	.062	23.274	1	355	.000*	1.928

a. Predictors: (Constant), Training (informal/formal) ESL

b. Dependent Variable: Total score of instructional strategies scale

Table 4.17 (*cont.*)

	Pearson Correlation										
			Instruct	tions Strategies Score	Sig. (1-tailed)						
TC	TAL Training ESL			.248	.0	00*					
	Coefficients										
			ndardized fficients Standardiz		rdized Coeffi	cients					
Model		В	Std. Error	Beta	t	Sig					
1	(Constant)	47.517	.715		66.495	.000					
	Training (informal/formal) ESL	5.249	1.088	.248	4.824	.000*					

n = 442

# Summary

The NEABIS survey had 453 respondents with the participants evenly distributed in nursing schools from each of the four geographical regions of the United States as well as being distributed equitably between the three the major types of schools (community college, private college/university, and state college/university) that house nursing education programs. Information gleaned from the surveys demonstrated that the majority of the nurse educators who completed the survey were 51—60 years old and self-identified as belonging to the white category of race/ethnicity. Although there is limited national data available about nurse educators, according to the most recent national survey (HRSA, 2010) these demographic characteristics demonstrate that generally speaking the nurse educators who participated in this research are similar to the population of nurse educators in the U.S. It is logical, therefore, to make the case that if

<sup>\*\*</sup>Correlation is significant at the  $p \le 0.01$  level (1-tailed).

the basic demographics of the survey participants mirror the nation's nurse educator population, the background attributes, beliefs, and instructional strategies reported by the research sample may also be mirrored in the U.S. population of nurse educators, and the results of this research can be generalized to nurse educators and nursing education programs in the U.S.

As with the general characteristics, the general educational preparation of these nurse educators reflects the overall nurse educator population in the U.S.: the majority of these nurse educators have a master's degree as their highest level of education, the majority of them work in baccalaureate degree nursing programs, and they have an average of 14 years of nursing education experience. Since information about U.S. nurse educators concerning the background attributes that may influence their beliefs and instructional strategies reportedly used by these nurse educators is not available, the results of this research are very informative.

Nearly one half of the nurse educators reported that their schools had a population of ESL nursing students between 2% and 10%, with some reporting as high as 80% of their nursing student population being comprised of ESL nursing students. This is a significant number of ESL nursing students impacted by nurse educators. These nurse educators reported having an average of 11 years' experience teaching ESL nursing students, but a majority of them did not report having any educational preparation for this responsibility. Only 39% of the nurse educators reported having some form of informal training for teaching ESL nursing students – more importantly only a miniscule 4% of nursing educators reported having any type of formal educational experience that prepared them to teach ESL nursing students. It was very clear that the majority of nurse

educators were not prepared for the current challenges of teaching in today's diverse classroom, and these nurse educators are well aware of their deficits since nearly one half of the respondents questioned their effectiveness in teaching ESL nursing students. Additionally, this survey has identified that even though effective teaching strategies related to ESL nursing students have been identified in the nursing literature, the majority of these nurse educators reported that they did not employ these tools. Even though it is apparent from these results that the lack of education and training to teach ESL nursing students is contributing to the lack of success in nursing education for ESL nursing students, it is heartening to know that this research has also demonstrated that there is a significant positive relationship between nurse educators who have received specific training to teach ESL nursing students and the use of recommended teaching strategies. Clearly, the impact of appropriate education to teach ESL nursing students cannot be emphasized enough.

Despite the lack of preparation for teaching ESL nursing students, most nurse educators reported having very positive general beliefs about the ESL nursing student. The majority do not believe ESL nursing students are difficult to teach or that ESL nursing students are detrimental to the overall learning environment, indeed, most nurse educators believe learning for all students is enhanced by the presence of ESL nursing students. Although nearly 73% reported they believe the ESL nursing student's academic challenges are related to language challenges, the majority agreed that ESL nursing students can succeed in nursing programs despite these English language challenges. Although these positive beliefs were positively correlated with an increased use of recommended teaching strategies, is it unfortunate that this research study also found that

those nurse educators who believed that ESL nursing students have a negative impact on teaching and the learning environment tended to use fewer instructional strategies identified as being helpful. Therefore, this research supports the importance of the development of positive beliefs in nurse educators towards ESL nursing students so that these beliefs can potentially move nurse educators towards learning about how to be better educators for the ESL nursing student.

Fortunately, this research study found that there is a significant relationship between beliefs towards ESL nursing students and background attributes of nurse educators. Nurse educators who have culturally diverse life experiences have increased positive beliefs about ESL nursing students; moreover, nurse educators who have experience with other languages also have more positive beliefs regarding ESL nursing students. At the opposite end of the belief scale, it was found that nurse educators who believe that ESL nursing students have a negative impact on the learning environment had minimal education as a nurse educator. Therefore, it stands to reason that providing nurse educators with life and language experiences as well as appropriate education can lead to positive beliefs and potential improvement in teaching practices.

The findings from this research indicated that nurse educator beliefs have a direct relationship with the use of recommended instructional strategies, and background attributes make both indirect and direct contributions to nurse educators' use of recommended instructional strategies. This research has shown that providing nurse educators with diverse cultural and language experiences can have a significant impact on the education of ESL nursing students; therefore, nursing education and nursing organizations should consider how to promote these experiences in not only nursing

education, but also the culture of nursing. Lastly, and most importantly there are opportunities to improve the state of teaching ESL nursing students in nursing education programs by providing opportunities for specific ESL nursing education either formally for nurses still in their university education preparation to be nurse educators or informally through continuing education for nurse educators currently in practice. It is incumbent upon all nurse educators and nursing educator programs to take notice and begin this critically important journey towards improvement in nursing education.

# Chapter V

### CONCLUSIONS AND RECOMMENDATIONS

### Introduction

The purpose of this research study was to investigate the nurse educator's background experiences (attributes) and beliefs related to teaching linguistically diverse nursing students, as well as the educational practices the nurse educators implement to develop a better understanding of the factors that impact linguistically diverse nursing students' success in nursing educational programs from the perspective of the nurse educator. The NEABIS survey was distributed to 2,000 randomly selected nurse educators from across the nation; of those invited to participate, the NEABIS survey completed by 442 U.S. nurse educators has provided specific information related to the background attributes, beliefs about teaching ESL nursing students, and instructional strategies they reported using when teaching ESL nursing students. Additionally, the relationship between these nurse educator background attributes, beliefs and instructional strategies was explored.

Analysis of the results in chapter four provides a foundation for the following conclusions, recommendations, and directions for future research in this area.

# Generalizability

Although the response rate for this survey was approximately 22%, the final sample of nurse educators was of sufficient size (n= 442) to make generalizations to the population of nurse educators (Mertler & Charles, 2008). It should be noted that this research is limited by subject self-selection to participate once invited, but it must also be considered that the findings from this research study may describe the beliefs held by many nurse educators in the United States about ESL nursing students and instructional strategies employed by nurse educators across the nation. The aggregate nurse educator demographics from this survey mirrored the U.S. nurse educator population, so that this survey sample can be considered a representative sample of nurse educators in the U.S. Additional support for these research findings being generalizable to the U.S. nurse educator population is found in the distribution of the survey respondents, which was evenly spread across the nation. About 25% of the sample population was found in each of the four regions of the United States. However, comparisons with and application to the general population of nurse educators should be made with caution since this is the first national survey to specifically collect this information.

#### Conclusions

This research study is significant in that it is a national study that provides a look into specific information concerning nurse educators' background, beliefs and instructional strategies specifically related to teaching ESL nursing students.

Additionally, this research has produced several significant findings and added to the body of knowledge concerning the relationship between nurse educator beliefs, background attributes and instructional strategies used related to the ESL nursing student. Based on the results of this research, the following conclusions can be drawn.

# Significant Population of ESL Nursing Students

There is a significant population of ESL nursing students impacted by nurse educators as evidenced by these nurse educators reporting that over one half of the nursing programs have an enrollment of between 6% and 35% ESL nursing students. If the average classroom size is 30 nursing students, the number of ESL nursing students in a class could range between two and ten students. Although reports by these survey respondents provide an indirect measure, this survey has provided a glimpse of the numbers of ESL nursing students enrolled in nursing educational programs across the U.S., and these numbers reflect the growing population of people in the U.S. who speaks a language other than English in the home. Therefore, improving the delivery of education for ESL nursing students through improved nurse educator pedagogy can promote ESL nursing student success in nursing programs so that they can go on to graduate. Improving the graduation rates of ESL nursing students can then lead to

increased numbers of linguistically diverse nurses in practice. This increase will begin to address the U.S. Office of Minority Health's mandate that patients with limited English proficiency (LEP) have equal access to healthcare in a language they understand (Office on Minority Health, 2007)

Need for Better Educator Preparation and Use of Recommended Instructional Strategies

Although this study did not determine the amount of education these nurse educators had to prepare them to be nurse educators, since their average age is older than 50 years, it is most likely that they had little graduate education preparation as educators prior to entering the educational venue (Oermann & Jamison, 1989; Zungolo, 2004; Bartles, 2007). Despite having little formal training as an educator, they utilize many good general instructional strategies; unfortunately, the evidence in this research supports that many instructional strategies identified in the nursing literature concerning teaching the ESL nursing student are not being employed. The failure to implement these strategies could be due to a lack of knowledge and understanding by the individual nurse educator, or implementation of these instructional strategies may be prohibited by institutional barriers. Nevertheless, these nurse educators recognize their deficits and lack of preparation to teach ESL nursing students: the majority (57%) had no preparation for teaching ESL nursing students and (87%) voiced a need to learn more about how to teach the ESL nursing student. Moreover, many of these nurse educators reported that they do not believe that they are effective educators with ESL nursing students.

It is important to note that those nurse educators who had received specific training in teaching ESL nursing students used more of the specific strategies useful to

ESL nursing students. Since many ESL nursing students are not receiving beneficial instruction, this research supports the premise of the nurse educator component of the "perfect storm" contributing to a lack of sufficient ESL nursing student graduates. This "perfect storm" is the confluence of the language challenges confronting ESL nursing students that impede their success in nursing programs and the complex challenges facing the nurse educator teaching the ESL nursing student that inhibit nurse educators from providing sufficient educational instruction. These findings also reflect and support the persistent call in the literature for faculty to adapt to the learning needs of the linguistically diverse nursing student and implement appropriate teaching strategies (Amaro, Abriam-Yago, & Yoder, 2006; Sanner & Wilson, 2008; Wang, Singh, Bird, & Ives, 2008; Starr, 2009). The findings in this study support the conclusion of Davidhizar and Shearer that there is a significant opportunity for improvement in nurse educator preparation and we can no longer "expect students to adapt to traditional teaching strategies. Rather it is becoming increasingly evident that the faculty must assume the responsibility of adapting to the needs of the student to help the student succeed" (2005, p. 356). It is imperative that nurse educators have access to the education and training to learn effective teaching strategies that can improve their teaching practices with ESL nursing students.

Relationship between Beliefs, Background Attributes and Instructional Strategies Used

When evaluating the results of the relationship between nurse educator beliefs
related to the ESL nursing student and instructional strategies used by the nurse educator,
it can be concluded that there is a direct relationship between nurse educator beliefs and

use of recommended instructional strategies. Nurse educators who have positive general beliefs regarding ESL nursing students use more of the instructional strategies identified as being helpful for these students. Conversely, teachers who believe ESL nursing students have a negative impact on the learning environment and teaching tend to use fewer of the instructional strategies identified as being helpful for ESL nursing students. These findings are significant because just as Rosenfeld and Rosenfeld (2007) found, developing positive teacher beliefs can result in more effective teaching. It is evident that working towards developing nurse educator positive beliefs regarding ESL nursing students will be a worthwhile endeavor that can result in nurse educators using recommended teaching strategies to promote success in ESL nursing students.

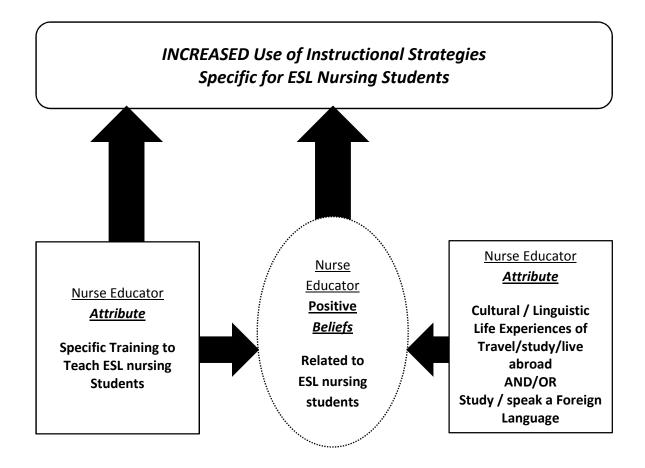
This research also found significant relationships between the nurse educator background attributes and both nurse educator beliefs and use of instructional strategies. It is important to note that this research found that nurse educators with less educational preparation as a nurse educator in general had more negative beliefs related to ESL nursing students. In contrast, nurse educators who had more culturally diverse life and language experiences tended to have more positive beliefs about the ESL nursing student. There was also a significant positive predictive direct relationship between the background attributes of nurse educators who have had training (formal or informal) to teach ESL students and the favorable beliefs related to the ESL nursing student. Moreover, nurse educators who had specific training to teach ESL students had a statistically increased prediction of use of instructional strategies that are beneficial for these students. Clearly, providing training for nurse educators not only provides them

with the tools for teaching, but also will promote positive beliefs that can improve their use of the instructional strategies.

A visual representation of the significant findings from this research study can be found in figure 5.1. At the center of the diagram is the circle that shows the significant influence that nurse educator beliefs have on their use of recommended instructional strategies. The diagram also shows how nurse educator background attributes impact the use of recommended instructional strategies. Nurse educator background attributes have an indirect influence on use of instructional strategies through their influence on the beliefs of the nurse educator. However, not only does the background attribute of specific training have an indirect influence, but it also has a direct positive impact on use of recommended instructional strategies by nurse educators. Lastly, the diagram demonstrates that affording nurse educators opportunities for cultural and linguistic experiences can promote their positive beliefs. These findings are significant in that there is now evidence that altering nurse educator background attributes and beliefs may increase the use of recommended instructional strategies and in turn have a positive impact on the success of the ESL nursing student. Clearly, there are opportunities to increase the use of recommended ESL teaching strategies with nurse educators by providing opportunities for education and experiences for nurse educators.

Figure 5.1

Relationship between Nurse Educator Attributes, Beliefs, and Instructional Strategies



## Recommendations

As the population of the United States continues to become more culturally and linguistically diverse, there is a mandate that healthcare providers should be able to meet the demands of this diverse population (Office on Minority Health, 2007). Thus, nurse educators will need to be able to teach the projected growing population of culturally and linguistically diverse nursing students. However, the ever-present nursing faculty shortage has required that nurse educators provide services to an increasing number of

students, which puts an added burden on the already-stretched nursing faculty who are not educationally prepared to teach ESL nursing students. The growing need for culturally and linguistically diverse nurses, the persistent nurse faculty shortage, and the lack of preparation of nurse educators to teach ESL nursing students combines to make a "perfect storm," which needs careful consideration.

To address this problem, nursing education leaders must not only address the needs of the ESL nursing student, but also the needs of the nurse educator. The findings from this research support that nurse educators care about ESL nursing students and believe they can succeed in nursing programs. However, to facilitate the movement of a greater number of ESL nursing students toward success requires nurse educators to do more than have positive caring beliefs; they need to have more accurate beliefs about and an understanding of the educational needs of ESL nursing students. Research has shown that teacher beliefs have changed as a result of interventions and experiences (Isikoglu, 2008; Gatt, 2009), which gives rise to consideration of how to provide nurse educators with diverse life and language experiences as well as the educational underpinnings to support the use of appropriate instructional strategies aimed at ESL nursing student success.

To address these needs, this research supports the following recommendations.

This research demonstrated the link between the background attributes of having diverse life and language experiences and positive beliefs about ESL nursing students. Therefore, there should be an increase in the diverse life and language experiences of current nursing students because current nursing students are future nurse educators. These diverse experiences could be part of the entrance requirements

(language coursework), and they could be incorporated into the required courses (diverse clinical experiences) or be offered as elective courses (international exchange and study-abroad programs). Recruiting and retaining culturally and linguistically diverse nursing students is another avenue to increase the background attributes of diverse life and language experiences – culturally and linguistically diverse nursing students have these lived experiences that they not only can draw upon, but also share with their peers.

- Future nurse educators need to have specific educational preparation to teach ESL nursing students. This research demonstrated that nurse educators who had specific training in teaching ESL nursing students used more instructional strategies aimed at promoting the success of these students. Therefore, there needs to be a concerted effort put into place to incorporate what is known about teaching ESL students into the graduate education programs for nursing faculty.
- This research supports the need for developing educational programs for current nurse educators related to teaching ESL nursing students. Resources need to be allocated to develop continuing-education programs related to best teaching practices for ESL nursing students. Nurse educators who responded to this survey reported they did not believe they were effective when teaching ESL nursing students and voiced the need for more education. There is an unmet need for not only continuing-education programs, but also educational resources that nurse educators could use as they continue to improve their teaching practices related to ESL nursing students.
- Peer mentoring programs should be developed that pair non-ESL nursing faculty who need to learn more about the challenges of being an ESL nursing student with new

nurse educators who were recently ESL nursing students. These new ESL nurse educators could share personal experiences with the non-ESL nurse faculty related to the barriers to learning, as well as the instructional strategies that were facilitative to learning. Because nurse educators are an aging population with many years of experience, this peer mentoring experience would also allow for these expert nurse educators to share their expertise and promote the growth of the newer nurse faculty.

- Individually, nurse educators need to engage in reflective thinking to consider how their beliefs may impact their teaching practices. Because beliefs are personal and often reside at a subconscious level (Cross, 2009), many nurse educators may not be aware of how their beliefs affect how they teach. Becoming aware of teaching practices that facilitate or produce barriers to ESL nursing students' learning is the first step in changing those practices.
- Collectively, nurse educators need to evaluate institutional practices. Policies and procedures (both formal and informal) need to be assessed for their effect on teaching and learning related to the ESL nursing student. Those policies that are determined to be detrimental should be revised so the learning environment is supportive of ESL nursing students.

#### **Future Research Directions**

The literature review demonstrated there was limited research and information about ESL nursing student success from the nurse educator perspective. Although this research adds to the body of knowledge regarding the relationship between nurse educator background attributes, beliefs, and instructional strategies related to teaching ESL nursing students, there remains much to be learned. This research supports the need for more research into the following areas.

- Although there is a great deal of information in the literature about the needs of the culturally diverse nursing student, there is a significant lack of specific information related to the learning needs of the ESL nursing student. Increased investigation into the specific learning leads of ESL nursing students will add to the body of knowledge and allow for development of the specific instructional strategies required to promote learning and successful outcomes.
- There is a vast body of work related to teaching the ESL student in grades K-12 in the educational literature. Logical assumptions have been made that educational practices used with success in the basic educational system are also effective in the higher educational system and in nursing education. Therefore, there needs to be definitive research that demonstrates the effectiveness of these instructional strategies in higher education and particularly in nursing education.
- This research demonstrated that nurse educators who received formal or informal education related to teaching ESL nursing students used more instructional strategies aimed at improving these students' learning. What was not revealed in this research was what type of education these nurse educators received. More investigation needs

to be done to learn how to incorporate best teaching practices into graduate nursing education most effectively. Additionally, research into what may have been the most effective strategies for informal education for nurse educators can lead to the development of productive continuing-education programs for them.

Further refinement and validation of the NEABIS survey tool should be completed through use in additional research studies. The survey tool used in this research was developed and validated in a pilot study by this researcher because a survey tool did not exist.

# Summary

ESL nursing students, and more importantly, nurse educators believe learning for all students is enhanced by the presence of ESL nursing students. Nurse educators in this survey used good general instructional strategies, but few reported using specific strategies aimed at teaching ESL nursing students. Indeed, these nurse educators voiced a need to learn more about how to teach ESL nursing students. This finding is foundational because nurse educators who had received specific training in teaching ESL nursing students used more of the specific strategies useful to these students. This research identified that nurse educators with less educational preparation as a nurse educator had more negative beliefs related to ESL nursing students, and nurse educators who had negative beliefs about ESL nursing students used fewer of the specific instructional strategies important to the success of ESL nursing students. In contrast, nurse educators

who had specific training to teach the ESL nursing student used more instructional strategies aimed at ESL nursing student success. Additionally, nurse educators who had more diverse life and languages experiences tended to have more positive beliefs about the ESL nursing student, which was also correlated with increased use of the recommended instructional strategies. Clearly, the findings of this research support that providing nurse educators with education and training can lead to nurse educators use of pedagogically sound instructional strategies when teaching ESL nursing students.

This research study is significant in that it is a national study that provides a look into specific information concerning nurse educators' background, beliefs and instructional strategies specifically related to teaching ESL nursing students. It is clear from this research that nurse educator beliefs have a direct positive relationship with the use of recommended instructional strategies, and background attributes make both indirect and direct contributions to nurse educators' use of recommended instructional strategies. This research adds to the nursing education body of knowledge and supports the need for developing educational programs for nurse educators related to teaching ESL nursing students. Additionally, this research supports implementing strategies that provide diverse life and language experiences for all nursing students that will foster more positive beliefs related to ESL nursing students. Moreover, this study supports Gidden's assertion that nurse educators begin making changes by first "acknowledging some of the inadequacies within nursing education that may be contributing to minority student attrition" (2008, p. 79). No doubt, it is time for not only the nursing education system to make changes, but also for nurse educators to individually make efforts to improve upon their practice and pedagogy.

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#### Appendix A

#### Youngs & Youngs Permission

From: george.youngs@ndsu.edu [george.youngs@ndsu.edu]

Sent: Thursday, November 19, 2009 11:37 AM

To: Fuller, Bonnie L. Cc: george.youngs@ndsu.edu

Subject: Re: Predictors of Mainstream Teachers' Attitudes Toward ESL

students

Bonnie,

Sorry for the delay in responding. We will be happy to send you a copy of the survey--no charge, just cite us if you use it. First, however, I will have to track it down, probably over the weekend.

I'm delighted that you are pursuing this topic. So much ad hoc research is done on these topics with little cumulative knowledge developing and few studies even doing any kind of multivariate analyses--much less theory-building or testing.

Incidentally, here is another article my wife and I did that might be of interest to you.

Youngs, G. A., Jr., & Youngs, C. A. (1999). Mainstream teachers' perceptions of the advantages and disadvantages of teaching ESL students. MinnTESOL/WITESOL Journal, 16, 15-29.

George Youngs

# Appendix B

### Byrnes, Kiger, and Manning Permission

**From:** Deborah Byrnes [deborah.byrnes@usu.edu]

Sent: Sunday, November 15, 2009 7:24 PM

**To:** Fuller, Bonnie L. **Subject:** Re: LATS

Dear Bonnie Fuller,

You are welcome to use the LATS (and adapt it) as desired. Good luck with your study — it sounds great.

Warm Regards,

Deborah Byrnes, PhD
Director, Curriculum and Instruction Doctoral Program
School of Teacher Education and Leadership
College of Education & Human Services
Utah State University
Logan, Utah 84322-2805
435-797-0396
Deborah.byrnes@usu.edu

# Appendix C

PILOT SURVEY QUESTIONS						
Questions related to faculty background	Questions related to faculty background attributes					
1. What is your gender?	<ul> <li>2. How many years have you been a nurse educator?</li> <li>4. Where is your nursing program located? <ul> <li>Urban</li> <li>Rural</li> </ul> </li> </ul>					
5. What is the type of Institution that houses your nursing program?  Community college Private college/university State college/university  7. What is your highest level of education as preparation for your position as a nurse educator?  BA/BS/BSN MA/MS/MSN Practice-focused doctorate Research-focused doctorate	6. What are the types of degree(s) offered by your nursing program? (select all that apply)  Associate Baccalaureate Graduate  8. What is your teaching specialty?  Adult health Community Infant and child health Maternal/newborn/women's health Childbearing/family Mental health Gerontology Other					
9. How many <i>years</i> have you taught ESL nursing students in the classroom, lab, or clinical setting?	10. What is your estimate of the percentage of ESL nursing students in your nursing program?					
11. Have you had formal training (college-level instruction) in teaching ESL students?   Yes	12. Have you had informal training (workshops, conferences, etc.) in teaching ESL students?					
∐ No	∐ No					

13. Select any of the following that are	14. What is your experience with other
applicable to your personal experience.	languages?
☐ Traveled abroad (outside the United States)	Standard American English is my first language, and I
Studied abroad (outside the United States)	have limited experience with other languages
Lived abroad (outside the United States)	Standard American English is my first language, and I have studied a foreign
☐ Hosted a foreign-exchange student	language  Standard American English
Live (lived) in a linguistically diverse community	is my first language, and I speak at least one foreign language
	Standard American English is not my first language
15. Describe your race/ethnicity/heritage? (select one or more that apply)	16. Select any of the following strategies aimed at promoting
American Indian or Alaska Native	the success of the ESL nursing student that have been used in your nursing program:
☐ Asian	☐ ESL support group
☐ Black or African American	<ul><li>□ ESL nursing tutoring</li><li>□ ESL language tutoring</li></ul>
☐ Hispanic or Latino	☐ Specific nursing advisor for ESL students
☐ Native Hawaiian or Other Pacific Islander	☐ Social events that encourage networking between ESL and
☐ White	language-majority students
	<ul> <li>Study groups specific for ESL nursing students</li> </ul>
	□ Conversation circles
	☐ Smaller clinical groups
	☐ Other (please describe)

	Questions related to beliefs about ESL nursing students				
	Please select the category that most refle	cts your agreement with the statement			
	ESL nursing students need to learn to adapt to the requirements of the nursing program.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	ESL nursing students often use their language deficits as an excuse for not doing well in the nursing program.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
3.	Having ESL nursing students in the classroom/lab/clinical setting is detrimental to the learning of the other students.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
4.	ESL nursing students are frequently lost or behind in the coursework.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	Most ESL nursing students have difficulty in nursing programs due to their academic deficits that are not related to language challenges.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	ESL nursing students do not invest sufficient time and effort into preparation for their learning experiences.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
7.	ESL nursing students' English language deficits hinder their ability to gain what they need from their learning experiences.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
8.	ESL nursing students who are able to converse well in English should also be able to read and write at the same level.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
9.	I frequently feel that I am not an effective educator when it comes to teaching ESL nursing students.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
10.	The educational background of ESL nursing students does not impact my teaching.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	ESL nursing students should ask their teachers for help.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
12.	Because of English language deficits, I have difficulty assessing ESL nursing students' competency.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	ESL nursing students are difficult to teach.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
	Learning for all students is enhanced by the presence of ESL nursing students.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			
15.	Pronouncing ESL nursing students' names correctly is important to demonstrate inclusion.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree			

16.	. It is important for me to learn about my ESL nursing students' experiences that have shaped their learning	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree
17.	Teaching in the classroom/lab/clinical setting is hampered by the presence of ESL nursing students.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree
18.	Even though I am an experienced nursing educator, I need to learn more about how to teach ESL nursing students.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree
	Even when they have English language deficiencies, ESL nursing students can still succeed in nursing coursework.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree
20.	. It should not be my responsibility to help ESL nursing students learn English.	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree
	Questions related to teaching practice	
	nursing st Please select a number that best estimat activi	es the frequency that you perform the
1.	I make an effort to connect with ESL nursing students on a personal level.	□ Not usually □ Sometimes □ Most of the time □ All of the time
2.	I strive to be supportive of ESL nursing students by making the learning environment inclusive and accepting.	□ Not usually □ Sometimes □ Most of the time □ All of the time
3.	I use stories, case studies, or scenarios to provide context for what I am teaching as an aid for ESL nursing students.	□ Not usually □ Sometimes □ Most of the time □ All of the time
4.	When there are ESL nursing students listening to me, I make an effort to speak more slowly and clearly.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
5.	I provide ESL nursing students learning resources at least one day before teaching sessions (for example: handouts, outlines, PPT slides, etc.)	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
6.	I make an effort to pair native English- speaking nursing students with ESL nursing students during learning activities.	□ Not usually □ Sometimes □ Most of the time □ All of the time
7.	Before teaching activities, I provide vocabulary lists specific to the course to ESL nursing students.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
8.	During learning activities in the classroom/lab/clinical setting I provide ESL nursing students with clear directions and expectations.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
9.	I use some type of graphic organizer	$\square$ Not usually $\square$ Sometimes $\square$ Most

(concept map), diagram, picture, or visual aid when teaching ESL nursing students.	of the time   All of the time
10. ESL nursing students are provided with informal assessments to evaluate their learning during my course.	□ Not usually □ Sometimes □ Most of the time □ All of the time
In a void the use of idioms and other colloquial expressions in my teaching activities when I have ESL nursing students.	□ Not usually □ Sometimes □ Most of the time □ All of the time
12. I help ESL nursing students access available school resources.	<ul><li>□ Not usually □ Sometimes □ Most of the time □ All of the time</li></ul>
13. I structure learning activities so ESL nursing students have opportunities to practice speaking English in a healthcare context.	□ Not usually □ Sometimes □ Most of the time □ All of the time
14. ESL nursing students are encouraged to use translators or bilingual dictionaries in my classroom/lab/clinical setting.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
15. I recommend additional resources (for example, study guides, computerassisted programs, etc.) to ESL nursing students to support their understanding of the nursing content.	□ Not usually □ Sometimes □ Most of the time □ All of the time
16. I encourage ESL nursing students to learn about the nursing content in their native language.	□ Not usually □ Sometimes □ Most of the time □ All of the time
17. Exam questions are evaluated for linguistic bias before they are given to the ESL nursing student in my courses.	□ Not usually □ Sometimes □ Most of the time □ All of the time
18. I have an "open door" office policy, and I encourage ESL nursing students to come see me.	□ Not usually □ Sometimes □ Most of the time □ All of the time
19. ESL nursing students are given permission and encouraged to audiotape my lectures and teaching presentations.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
20. I allow ESL nursing students extra time for thinking and processing when I interact with them in the classroom/lab/clinical setting.	□ Not usually □ Sometimes □ Most of the time □ All of the time
21. I provide extra time for ESL nursing students to complete exams.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time
22. I help ESL nursing students prioritize key elements of learning activities.	☐ Not usually ☐ Sometimes ☐ Most of the time ☐ All of the time

# Appendix D Email invitation to participate in the research project

#### **Greetings Nursing Faculty:**

Doctoral student Bonnie Fuller, with the guidance of her dissertation advisor Dr. Christa de Kleine from the College of Notre Dame of Maryland, School of Education, is conducting a study about the relationship between nursing educator background and beliefs concerning the ESL nursing student and instructional methodologies used when teaching these students.

As a full-time faculty member in an associate or baccalaureate program of nursing, you are invited to participate in this online survey research protocol. You will be asked questions related to your beliefs about teaching ESL nursing students, what practices you use when teaching ESL nursing students, and some general questions about you and your nursing program. It will take less than 15 minutes to complete the survey.

Thank you for your consideration; to participate in this research study, you may access the survey by clicking here http://www.surveymonkey.com/s/2TFR5TG.

Bonnie Fuller, PhD(c), MSN, RN, CNE Clinical Assistant Professor Towson University Department of Nursing BU 100K 8000 York Road Towson, MD 21252 410-704-2391 fax: 410-704-6333

## Appendix E Final NEABIS Survey Tool from SurveyMonkey

You are invited to participate in this research project because you are a nurse educator teaching in an Associate or Baccalaureate nursing program in the United States. The purpose of this research project is to learn about nurse educators' beliefs and teaching practices related to nursing students who have English as a second or additional language (the ESL nursing student).

You are being asked to use approximately 15 minutes to self reflect and report your personal beliefs and practices. Although there is no direct benefit to you personally through your participation in this survey, we hope that in the future other people might benefit from this study through improved understanding of the complexities of teaching the ESL nursing student.

To protect your confidentiality, no identifying information is asked about you in the survey such as name or place of employment. To enhance your anonymity and confidentiality, the electronic survey tool in Survey Monkey is constructed so that the IP address of the computer you are using is not collected. The anonymous collection of information promotes your confidentiality since there is no link between the data collected and you. Additionally, all of the information collected is held on a password protected computer system for security and only accessible by the researcher. Survey Monkey recognizes the importance of confidentiality of data, and has posted a security statement on their website that describes how they handle data and promote security. You can review their policy and procedure for ensuring security by clicking on this link: Privacy Policy

Your participation in this research is completely voluntary. If you decide to participate in this research, you may stop participating at any time by clicking on the "exit survey" button in the top right corner.

This research is being conducted by Bonnie Fuller, a doctoral candidate at the College of Notre Dame of Maryland. You may contact her at

bonnielfuller@verizon.net 240-298-1270

If you have any questions about the research study, please contact

Dr. Christa de Kleine
Associate Professor & Coordinator MA in TESOL program
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21212
cdekleine@ndm.edu 410-532-3157

By clicking on the "next" button at the bottom of the page you verify that:

- you are at least 18 years of age
- the research has been explained to you, and
- you freely and voluntarily choose to participate in this research project.

To continue on to the survey click "next" below, to exit the survey, click on the "exit this survey" button in the top right corner.

1. In what state is your nursing program located?  State:
2. Where is your Nursing Program located?
3. What is the type of Institution that houses your Nursing Program?

4. What are the types of degree(s) offered by your Nursing Program? (select all that apply)  Associate  Graduate  5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health  Community  Infant & Child Health  Childbearing/Family  Mental Health  Gerontology  Other  Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US)  Studied Abroad (outside the US)  Hosted a foreign exchange student  Live (Rived) in a linguistically diverse community				
Associate Baccilaureate Graduate  5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator? BA/BS/BSN MA/MS/MSN Practice focused Doctorate Practice focused Doctorate Octorate  9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Used Abroad (outside the US) Hosted a foreign exchange student	4. What are the type	es of degree(s) offered	d by your Nursing Program? (select all th	at
Baccalaureate Graduate  5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Uved Abroad (outside the US) Hosted a foreign exchange student	apply)			
Graduate  5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Research focused Doctorate 9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	Associate			
Graduate  5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health  Community  Infant & Child Health  Maternal / Newborn / Women's Health  Childbearing/Family  Mental Health  Gerontology  Other  Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN  MA/MS/MSN  Practice focused Doctorate  Research focused Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US)  Lived Abroad (outside the US)  Lived Abroad (outside the US)  Hosted a foreign exchange student	Raccalaureate			
5. What is your estimate of the percentage of ESL nursing students in your nursing program? (please enter a number between 0-100)  6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health  Community  Infant & Child Health  Childbearing/Family  Mental Health  Gerontology  Other  Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN  MA/MS/MSN  Practice focused Doctorate  Research focused Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US)  Lived Abroad (outside the US)  Lived Abroad (outside the US)  Hosted a foreign exchange student				
6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US) Lived Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	Graduate			
6. How many years have you been a Nurse Educator? (please enter a whole number)  7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	5. What is your esti	mate of the percentag	ge of ESL nursing students in your nursi	ng
7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator? BA/BS/BSN MA/MS/MSN Practice focused Doctorate Research focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	<u> </u>	(5)		<del>8</del> 3
7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Research focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student				
7. What is your teaching specialty?  Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Research focused Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	6. How many years	have you been a Nur	se Educator? (please enter a whole num	ber)
Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator? BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate Doctorate 9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student			·	· ·
Adult Health Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator? BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate Doctorate 9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	7. What is vour tead	ching specialty?		
Community Infant & Child Health Maternal / Newborn / Women's Health Childbearing/Family Mental Health Gerontology Other Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator? BA/BS/BSN MA/MS/MSN Practice focused Doctorate Doctorate Doctorate  9. Select any of the following that are applicable to your personal experience. Traveled Abroad (outside the US) Studied Abroad (outside the US) Lived Abroad (outside the US) Hosted a foreign exchange student	_	<b>3</b>		
Infant & Child Health  Maternal / Newborn / Women's Health  Childbearing/Family  Mental Health  Gerontology  Other  Other (please specify)  8. What is your highest level of education as preparation for your position as a Nurse Educator?  BA/BS/BSN MA/MS/MSN Practice focused Doctorate Research focused Doctorate  9. Select any of the following that are applicable to your personal experience.  Traveled Abroad (outside the US)  Studied Abroad (outside the US)  Lived Abroad (outside the US)  Hosted a foreign exchange student	~			
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	Lived Abroad (outside th	ie US)		
Live (lived) in a linguistically diverse community	_			
	Hosted a foreign exchar	ge student		
	Constitution of the Consti			

10. What is your experience with other languages?			
Standard American English is my first language and I have limited experience with other languages			
Standard American English is my first language and I have studied a foreign language			
Standard American English is my first language and I speak at least one foreign language			
Standard American English is not my first language			
11. How many years have you taught ESL nursing students in	he clas	sroom. lab or	
clinical setting? (please enter a whole number)		ŕ	
There are many variations of language abilities that have been described with terms su Languages (ESOL), Limited English Proficiency (LEP), or English as a Second Langua survey, the common acronym "ESL" was chosen to represent these variations. When a nursing student who has English as an additional language to his or her first (native)	ige (ESL). he term "E	For the purposes of this	
As you continue this survey, please consider your teaching interactions with ESL nurs education.	ng studen	ts in all areas of	
42 Places colout the enteriory that most vellecte visus agreement	.4 voith th	ha atatamant	
12. Please select the category that most reflects your agreeme			
	Disagre	Disagree Agree	
Even when they have English language deficiencies, ESL nursing students can still be successful in nursing coursework.	0	0000	
It is important for me to learn about my ESL nursing students' experiences that have shaped their learning.	$\circ$	0000	
Having ESL nursing students in the classroom/lab/clinical setting is detrimental to the learning of the other students.	0	0000	
Most ESL nursing students have difficulty in nursing programs due to their academic deficits that are	not O	0000	
related to language challenges.  Because of English language deficits, I have difficulty assessing ESL nursing students' competencies	$\circ$	0000	
Pronouncing ESL nursing students' names correctly is important to demonstrate inclusion.	ŏ	0000	
ESL nursing students are frequently lost or behind in the coursework.	Õ	0000	
ESL nursing students are difficult to teach.	ŏ	ŎŎŎŎ	

not of sometimes the usually	I make an effort to connect with ESL nursing students on a personal level.  I use stories, case studies or scenarios to provide context for what I am teaching as an aid for ESL nursing students.  I make an effort to pair native English speaking nursing students with ESL nursing students during learning activities.  During learning activities in the classroom/lab/clinical setting I provide ESL nursing students with clear directions  And expectations.  ESL nursing students are provided with informal assessments to evaluate their learning during my course.  I assist ESL nursing students to access school resources available to ESL students.  ESL nursing students are encouraged to use translators or bilingual dictionaries in my classroom/lab/clinical setting.  I allow ESL nursing students extra time for thinking and processing when I interact with them in the classroom/lab/clinical setting.  I assist ESL nursing students or prioritize key elements of learning activities.  14. Please select the category that most reflects your agreement with the statement Strongly Disagree Not Agree Sure Agree  Not Agree Strongly Disagree Not Agree  ESL nursing students often use their language deficits as an excuse for not doing well in the Nursing  Foogram.  Learning for all students is enhanced by the presence of ESL nursing students.  ESL nursing students who are able to converse well in English should also be able to read and write at the same level.  ESL nursing students invest sufficient time and effort into preparation for their learning experiences.  Escl. pursing students invest sufficient time and effort into preparation for their learning experiences.  Tacking in the classroom/lab/clinical setting is hampered by the presence of ESL nursing students.	3. Please select a category that best estimates the frequency that activity	you	hell	om t	iiC	
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I frequently feel that I am not an effective educator when it comes to teaching ESL nursing students.	I frequently feel that I am not an effective educator when it comes to teaching ESL nursing students.	eaching in the classroom/lab/clinical setting is hampered by the presence of ESL nursing students.	0	$\circ$	O	$\circ$	C
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		frequently feel that I am not an effective educator when it comes to teaching ESL nursing students.	O	O		O	

5. Please select a category that best estimates the frequency that you	u perform the
ctivity	
	not of all of of usually the time
strive to be supportive of ESL nursing students by making the learning environment inclusive and accepting.	0 0 00
When there are ESL nursing students listening to me, I make an effort to speak more slowly and clearly.	0 0 00
Before teaching activities, I provide vocabulary lists specific to the course to ESL nursing students.	0 0 00
utilize some type of graphic organizer (concept map), diagram, picture or visual aid when teaching ESL nursing tudents.	$^{\circ}$ O O O
avoid the use of idioms and other colloquial expressions in my teaching activities when I have ESL nursing tudents.	0 0 00
structure learning activities to so that ESL nursing students have opportunities to practice speaking English in a ealthcare context.	0 0 00
recommend additional resources (for example study guides, computer assisted programs, etc.) to ESL nursing tudents to support their understanding of the nursing content.	0 0 00
exam questions are evaluated for linguistic bias before they are given to the ESL nursing student in my courses.	0 0 00
provide extra time for ESL nursing students to complete exams.	0 0 00
have an "open door" office policy and I encourage ESL nursing students to come to see me.	0 0 00
ESL nursing tutoring	
ESL nursing tutoring	
ESL language tutoring	
Specific nursing advisor for ESL students	
Social events that encourage networking between ESL and language majority students	
Study Groups specific for ESL nursing students	
Conversation Circles	
Smaller clinical groups	
Other (please describe)	
Other (please describe)	
7. Have you had formal training (college level instruction) in teaching	ESL students?
Yes	,
O No	

	d informal training (workshops, conferences, etc.) in teaching ESL
students?	
O Yes	
O No	
19. What is you	r age category?
20. What is you	r gender?
21. What is your	race/ethnicity/heritage? – select one or more that apply
American Indian or	· Alaska Native
Asian	
Black or African An	merican
Hispanic or Latino	
	On B is the
	r Other Pacific Islander
White	
22 Please use t	his text box if you would like to provide additional comments.
ZZ. Fiedse use t	ins text box if you would like to provide additional confinents.
	_
Thank you for your part	icipation, you have now completed the survey.

#### Appendix F

#### IRB Approval to conduct this research study



Learn for Life®

Date: Dec. 1, 2010

Name: Christa De Kleine, Ph. D.

Title: Nursing Educator Background, Attitudes, and Beliefs Concerning the ESL Nursing Student, and Instructional Methodologies Used

School/Dept: School of Education

College of Notre Dame of Maryland

Baltimore, MD 21210

RE: IRB-10-11-111149

Dear Dr. De Kleine:

The Institutional Review Board (IRB) of the College of Notre Dame of Maryland has reviewed your student Bonnie Fuller's proposal and has approved the study.

Your approval to conduct research will expire Dec 2, 2011. You are required to submit a renewal application within 60 days of your expiration date in order to continue your research beyond the one-year period.

During the course of carrying out your research you are responsible to promptly report to the IRB any unanticipated problems involving risks to participants, investigators, or staff during the course of carrying out research. In addition, any changes in research activity during this approval period may not be conducted without IRB review and approval. Please refer to your unique IRB proposal number on all responses to the Board.

If you have any questions, please do not hesitate to contact me at bconnor@ndm.edu.

Sincerely,

Dr. Bridget Connor, Acting Chair, Institutional Review Board College of Notre Dame of Maryland

#### Appendix G

#### **Informed Consent**

Study Title: The Relationship Between Nursing Educator Background, Attitudes and Beliefs Concerning the ESL Nursing Student, and Instructional Methodologies Used When Teaching the ESL Nursing Student

Nurse Educator and Doctoral Student Bonnie Fuller, with the guidance of her Dissertation Advisor, Dr. Christa De Kleine, is conducting this study through the School of Education at the College of Notre Dame of Maryland, Baltimore.

The following describes a research study and what you may expect if you wish to participate. You are encouraged to read this informed consent carefully and contact the researchers with any questions you may have before making your decision whether or not to participate.

Participation in this voluntary research study is designed to explore what Nurse Educators know and believe about teaching ESL nursing students and what instructional methodologies these Nurse Educators use when teaching ESL nursing students. There is minimal to no risk to you as an individual related to taking park in this research study. While there is no immediate direct benefit to you as a result of participating in this research study, the information obtained from the study may benefit both Nurse Educators and nursing students in the future by adding to our knowledge about teaching and learning related to ESL nursing students.

Your responses are strictly anonymous and will not be linked to you by personal identifiers or Internet Protocol (IP) addresses. The data you share through this survey are part of the aggregated data set and all responses are electronically stored using computerized security systems as anonymous data that can only be accessed by the researchers.

Your participation in this survey is completely voluntary. You are free not to participate in this study, and once starting you may exit the survey at any time or whatever reason. The survey should take approximately 15 minutes to complete.

If you have any questions or concerns about this study, you may contact Bonnie Fuller, MSN, RN, CNE, Doctoral Candidate at bonnielfuller@verizon.net / 240-298-1270 or Christa de Kleine, PhD, at cdekleine@ndm.edu / 410-532-3157.