FROM HEALTHCARE PROVIDER TO HEALTHCARE EDUCATOR: STRATEGIES FOR EFFECTIVE TRANSITION

Ву

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ABSTRACT

This study attempted to identify effective strategies for healthcare providers transitioning into educational leadership roles. The study employed a mixed method research design. The population was selected from colleges and universities, nationally, which sponsored selected healthcare training programs. Healthcare faculty were chosen to participate based on the following criteria: (a) their respective institution was regionally accredited and healthcare program accredited by the appropriate specialty agency, (b) their respective institution was of a college or university status, and (c) their respective institution sponsored five or more of the selected healthcare training programs. Via an online questionnaire, quantitative and qualitative data were collected. Results showed that healthcare educators transitioned into their positions based on their devotion to their profession/desire to promote it and the satisfaction they received through teaching. These two factors also influenced healthcare educators' decisions to remain in academia long term. Data demonstrated that clinical work and academic experiences, previous theoretical educational training, and support from colleagues were the most helpful components of their transition into education. Factors which hindered the transition from healthcare to education included an insufficient background in educational theory/practice, lack of mentoring, lack of orientation, and excessive workload. New healthcare educators explained that they were least

prepared for activities such as student assessment, instructional design/delivery, administrative responsibilities, counseling/advising, learning environment management, and dealing with conflict. Data revealed that new healthcare faculty were provided with mentoring opportunities, college in-service activities, and general orientation sessions; however, data further revealed that the educators believed better mentoring, additional educational courses, and more thorough orientation would have been more beneficial during their transition. Effective healthcare educators were described as being prepared with the appropriate level of knowledge/skill, demonstrating excellent communication skills, being sensitive/responsive to students' needs, exhibiting professional behavior, and being motivated. Implications of this study related to recruitment of appropriate individuals who would remain in education long term, and thus could (a) improve the competence and success of students, (b) improve patient care, and (c) alleviate the healthcare educator shortage.

DEDICATION

This dissertation is dedicated to my family. I hope I have made you proud.

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This dissertation is the result of several years of dedication and hard work.

And, without the support of several individuals, I would not have been able to see this research through to conclusion.

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CHAPTER 1

INTRODUCTION

Background

The difficulty that many healthcare programs experience in recruiting, developing, and retaining qualified healthcare educators is identified by a review of current literature. In recent years, literature has documented a shortage of healthcare providers wishing to pursue careers in education (Dyson, Greene, & Fraher, 2004; Elwood, 2007; Giordano, 2004; Hilton, 2003; Lyons, 2007; Lyons, Lapin, & Young, 2003; MacKinnon & Leighton, 2002; Majeski, 2004; Morris, 2006; Trossman, 2002; United States Department of Health and Human Services, 2005). Additionally, the literature has identified factors which discourage healthcare providers from transitioning into academia. These include poor salaries offered in academia, lack of educational credentials, and the demands of the educational positions (Swafford & Legg, 2007). It was also documented that the current workforce of healthcare educators was aging (Trossman, 2002) and many current educators were nearing the age of retirement (Gonzalez, Stewart, & Robinson, 2003; Hilton, 2003; Morris, 2006). In total, these factors contributed to the growing healthcare educator shortage. While a number of individuals have investigated the reasons behind the shortage of healthcare educators, few have attempted to

identify methods for facilitating the transition from healthcare provider to healthcare educator which in turn might help alleviate the educator shortage.

Accreditation standards governing healthcare education varied from discipline to discipline (Baker & Dunn, 2006); however, one similarity was evident. In order to teach within a healthcare training program, standards required faculty to hold, at minimum, appropriate health certifications or licenses. Most accrediting agencies applied more stringent standards requiring healthcare educators to hold degrees beyond their initial level of training. These accreditation requirements presented challenges for colleges and universities that sponsored healthcare training programs. Many educational institutions often had difficulty recruiting, developing, and ultimately retaining qualified healthcare faculty.

Statement of the Problem

Medical technologies continue to advance at an exponential rate. This expansive growth creates a two-fold dilemma in health care. First, in order to maintain a community of competent healthcare providers that is capable of staying abreast of the medical advances, quality individuals must be vigorously recruited to enter healthcare training programs. Second, colleges and universities must provide quality faculty to administer and deliver the healthcare training programs.

Unfortunately, the efforts to recruit healthcare providers to the educational arena and then to develop and retain them are often challenging. A shortage of healthcare educators is documented and has been projected to worsen in the near future. In order to develop and retain healthcare educators, effective strategies must

be identified which will facilitate the transition from healthcare provider to healthcare educator.

Purpose of the Study

The purpose of this study was to identify effective strategies to assist healthcare providers who transition into educational leadership positions by identifying methods relating to development and ultimately retention of those individuals. Specifically, the study attempted to identify effective strategies which promoted and supported the development of skills needed for success in the classroom. The study evaluated perceptions of healthcare educators as to factors which encouraged an interest in transitioning into a career in education and which factors would and/or did encourage a long-term commitment to an educational career. The study also evaluated perceptions of healthcare educators as to the factors which they considered most effective in aiding the transition from the healthcare environment to the educational arena. Finally, the study evaluated perceptions of healthcare educators as to factors which they defined as effective healthcare instruction.

Research Questions

The purpose of this study was to identify strategies which assist healthcare providers in making smooth transitions into educational leadership roles. Specific research questions were as follows:

Research Question 1: What factors do healthcare educators identify as being most influential in their decision to transition from healthcare provider to healthcare educator?

Research Question 2: What factors do healthcare educators identify as being the most conducive for preparation in a career in healthcare education?

Research Question 3: What factors do healthcare educators identify as being the least conducive for preparation in a career in healthcare education?

Research Question 4: What factors do healthcare educators identify as being most influential in their decision to remain in education long-term?

Research Question 5: What demonstrated behaviors cause one to be an effective healthcare educator?

Rationale for the Study

In the progressive field of medical care, the importance of preparing an adequate number of competent healthcare providers who were capable of providing quality patient care was observed. A critical component of this educational process was to identify competent healthcare providers who were willing to transition into educational leadership roles and serve as qualified faculty. While recruiting healthcare educators was the first phase of the process, a more fundamental component was to provide the new healthcare educators with information and skills needed for success in the classroom. By identifying effective methodologies for facilitating the transition from healthcare provider to healthcare educator, there was a greater possibility that these individuals might remain in the field of education,

thus, helping to relieve the identified healthcare educator shortage and continue to prepare highly qualified healthcare providers.

Significance of the Study

With the current shortage of healthcare educators predicted to increase in the near future, qualified healthcare providers who are willing to transition into educational leadership roles must be identified. This study allowed an investigation of factors which influenced such a transition. The study also attempted to identify experiences which facilitated and/or impeded the transition from healthcare to education and experiences which increased and/or decreased the retention of healthcare educators. The perceptions of healthcare educators were also investigated with regard to identifying common characteristics of effective healthcare educators. Communication of the findings could potentially provide an avenue for alleviating the healthcare educator shortage.

Definition of Terms

For the purpose of this study, the following definitions will be used:

Accreditation: a process in which a governing organization reviews, evaluates, and passes judgment (i.e. granting approval, placing on probation) on an institution or educational program (Fitzpatrick, et. al., 2004, p. 114).

Healthcare specialty areas: medical specialty areas which provide supportive patient care. Specialty areas include: dental assisting and hygiene, diagnostic medical sonography, emergency medicine, health information

management, nuclear medicine technology, nursing, radiation therapy technology, radiologic technology, rehabilitative therapy (occupation and physical), and respiratory care (Anderson, 2002, p. 1278). Most programs designed to prepare allied healthcare providers often award certificates or associate degrees. Some offer bachelor level degrees; even fewer award master and doctoral degrees. Upon completion of a healthcare training program, the graduate must sit for a national registration examination in order to become certified or registered in the profession.

Educational leadership positions: faculty positions which are defined by teaching assignments, college service requirements, program management and clinical supervision of students as specified by accrediting agencies.

Delimitations of the Study

The stimulus for this study was the shortage of healthcare educators with an emphasis being placed on quality instruction. Therefore, the study was delimited for population and focused on the perceptions of healthcare educators of accredited healthcare training programs in the United States. Healthcare educators employed in unaccredited programs or accredited programs sponsored by unaccredited colleges or universities were not included in this study. The population was further delimited by the fact that only healthcare programs granting certificate, associate, or bachelor degrees in dental (assistant and hygiene), emergency medicine-paramedic, health information management, nursing, pharmacy technology, radiologic technology imaging (to include, where applicable, diagnostic medical sonography, nuclear medicine technology, and/or radiation therapy), rehabilitation

therapy assistant (occupational and/or physical), and respiratory care were targeted for the study.

Limitations of the Study

Limitations of this study related to the variances in the transitional experiences of participants. It was understood that some participants may have received little or no support during their transition from healthcare to education while others may have received extensive support.

Assumptions

The following assumptions were made:

- the email addresses gathered for the study participants were valid and active,
- the dean/department head received the invitation to participate in the study via email,
- the dean/department head forwarded the invitation to participate in the study to the appropriate healthcare faculty, and
- the embedded link to the online questionnaire functioned properly when forwarded.

Summary and Outline

Chapter 1 provided a brief introduction to the background of the problem relating to the healthcare educator shortage. The issue was presented that

identifying effective methodologies for supporting healthcare providers who were transitioning into educational leadership roles might assist in the development and ultimately the retention of those individuals. In addition, the chapter provided information on the study's purpose, rationale, significance, research questions, definition of terms, delimitations, and limitations. The subsequent chapters will further develop the topic and provide relevant data, discussion and conclusions. Chapter 2 presents a review of background and recent literature relating to healthcare education and accreditation. Discussion of accreditation history, its relation to healthcare education, and the current recruitment and shortage of healthcare educators is presented. Characteristics of effective healthcare educators, a brief overview of adult learning theory, competency based education, and a sampling of training and development programs are presented. In Chapter 3, the methodology that was followed to address the research questions is described. Chapter 4 provides the results of the research. Chapter 5 summaries the results, provides discussion of the results, presents implications for the profession, and provides recommendations for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The literature relating to the process by which healthcare providers transition into healthcare educators is somewhat limited. This chapter will offer background information important to the study with regard to (a) educational accreditation, (b) the healthcare educator shortage, including recruitment and retention, (c) characteristics of effective healthcare educators, and (d) training and development models for new healthcare educators. While a comprehensive analysis of suggested resolutions is outside the scope of this research, many solutions may propose and direct future inquiry related to the impact that implementation may or may not have on the healthcare educator shortage. Therefore, a sampling of such solutions from the literature will be included, as appropriate.

A Brief History of Accreditation in the United States

Over a century ago, accreditation was developed in the United States as an external means of reviewing educational processes, thus ensuring quality and identifying methods for making continuous improvements (Eaton, 2009; Morse & Santiago, 2000). Two types of accreditation emerged. In the late 1880s, regional accreditation began with a focus of assessing the quality of educational institutions

as whole entities; later, specialized or programmatic accreditation was conceived as professional and technical training programs were developed (Baker & Dunn, 2006).

Regional accreditation was initiated as a means to standardize college and university entrance requirements and eventually evolved into a quality assurance process (Baker & Dunn, 2006). The six regional accrediting agencies which were formed include, in order of development: New England Association of School and Colleges in 1885 (NEASC, n.d.), Middle States Association of Colleges and Schools in 1887 (MSA, n.d.), Southern Association of Colleges and Schools in 1895 (SACS, 2010), North Central Association of Colleges and Schools in 1895 (NCA, n.d.), Northwest Accreditation Commission in 1917 (NWAC, n.d.), and Western Association of Schools and Colleges in 1962 (WASC, n.d.). In 1905, the American Medical Association (AMA) was the first organization to pursue self-regulation by developing and publishing educational standards for medical training which eventually led to specialized or programmatic accreditation (AMA, 2010). However, shortly thereafter, a number of healthcare disciplines followed suit by founding their own associations, developing educational standards, and establishing specialized accreditation guidelines for their respective professions (Baker & Dunn, 2006). It was these technical training programs that refined the accreditation process to include a rigorous self evaluation through the writing of a self-study report, an onsite visit by external peer evaluators, and a published, official report of findings (Dill, Massy, Williams, & Cook, 1996).

Accreditation Standards for Healthcare Training Programs and Educators

Like regional accreditation, specialized or programmatic accreditation was established to guarantee didactic quality; however, it also was designed to examine the clinical components of the training (Giordano, 2003). As the various professional organizations began to develop, their subsequent accrediting agencies formed. Giordano (2003) suggested that the development of specific educational standards were likely a result of the professions' collaboration with respective communities of interest. This critical input produced accreditation criteria which more accurately reflected the professions' standards and provided specific guidelines for developing, implementing, and operating the respective programs. Programs, however, were granted academic freedom in specific operational procedures as long as all accreditation standards were met (Giordano, 2003).

Programmatic accreditation standards were designed to be specialty-specific and they varied between the healthcare training programs; however, commonality existed in the standards which governed faculty credentials. In every instance, accrediting agencies required that healthcare educators hold, at minimum, the appropriate professional certifications or licenses (Commission on Accreditation in Physical Therapy Education, 2007; Commission on Dental Accreditation, 1998; Joint Review Committee on Radiologic Technology, 2001; National League for Nursing Accrediting Commission, 2004). A number of accrediting agencies and organizations later developed more stringent standards governing faculty credentials; several required faculty to hold degrees beyond their initial training or in some case more advanced degrees.

Current Shortage of Healthcare Educators

Morris (2006) remarked that the declining number of healthcare educators "has received considerable attention in recent years" (p. 107). This was substantiated by various authors and researchers (Brady, 2007; Dyson, Greene & Fraher, 2004; Elwood, 2007; Falk, 2007; Giordano, 2004; Hilton, 2003; Lyons, 2007; Lyons, Lapin, & Young, 2003; MacKinnon & Leighton, 2002; Majeski, 2004; Morris, 2006; Starnes-Ott & Kremer, 2007; Trossman, 2002; United States Department of Health and Human Services, 2005). Hilton (2003) predicted that the current shortage of healthcare educators would worsen over the next ten years. This projection was based, in part, on data relating to the increasing number of educators who were nearing the age of retirement (Falk, 2007; Gonzalez, Stewart & Robinson, 2003; Hilton, 2004; Morrison, 2006; Starnes-Ott & Kremer, 2007).

A number of other causative factors associated with the educator shortage were identified; however, there were three which dominated the literature. One notable factor was the salary disparities between the healthcare and educational settings (Giordano, 2004; Hilton, 2003; MacKinnon & Leighton, 2002; Spivey, Chisholm, Murphy, Rice, & Morelli, 2009; Swafford & Legg, 2007; Trossman, 2002; United States Department of Health and Human Services, 2005). Hilton (2003) documented that healthcare professionals could earn \$20,000 more per year in the clinical setting as compared to an academic position. Morris (2006) stated that "[graduates] often begin working in the clinical setting at much higher salaries than their instructors who have several years of experience and additional degrees" (p. 107).

Another dominating factor of the healthcare educator shortage was identified as the required educational standards established by accrediting agencies. In addition to professional licenses, many healthcare training programs mandate faculty to hold degrees beyond their initial training. Unfortunately, few healthcare professionals have met those educational criteria (Giordano, 2004; Lyons, 2007; Swafford & Legg, 2007).

At the time of Hilton's research in 2003, only approximately 3% of healthcare providers held master's degrees and less than 1% held doctorate degrees. Healthcare providers identified work and family responsibilities and lack of time and money as reasons for not continuing their education (Giordano, 2004). Others who wished to pursue advanced degrees stated they often had difficulty locating an appropriate degree program. In addition, advanced degree programs in healthcare specialties were few in number. Many times, healthcare providers sought degrees which focused on administration, business, or education (Giordano, 2004 & Hilton, 2003).

As mentioned in the literature, the third factor contributing to the healthcare faculty shortage was identified as attrition ("Increasing faculty retention," 2009). Many healthcare training programs documented difficulty in retaining qualified healthcare faculty (Falk, 2007; "Increasing faculty retention," 2009; Starnes-Ott & Kremer, 2007). Schraw and Brooks (n.d.) alleged that this could be related back to the fact that many healthcare educators entered the academic setting with little formal training in educational theories and strategies. Salary disparities, excessive workload, work hours (Brady, 2007), unfamiliarity with institutional traditions and

lack of support (Starnes-Ott & Kremer, 2007) were also linked to healthcare educator burnout and a desire to leave academia.

This section of the literature review focused on three primary causative factors associated with the healthcare educator shortage. Giordano (2004) asserted that no simple solutions existed to the healthcare educator shortage. However, several individuals proposed possible resolutions including identifying potential future educators among allied health students, promoting the benefits of educational careers, mentoring new faculty members, and pursuing ways to supplement faculty salaries (Falk, 2007; Giordano, 2004; Hessler & Ritchie, 2006; Hilton, 2003; MacKinnon & Leighton, 2002; Trossman, 2003).

Recruitment of New Healthcare Educators

Giordano (2004) identified one of the challenges of recruiting healthcare educators as being the stringent accreditation standards which govern healthcare programs and faculty. Because healthcare educators must, at minimum, hold professional certifications or licenses, many healthcare programs have found it appropriate to recruit new faculty from clinical settings (Giordano, 2004).

The evolution of most currently employed healthcare educators was identified as a protracted, yet predictable process. After graduating from an accredited allied health program, healthcare providers typically entered the clinical setting and gained experience in their specific discipline. The individuals who later became interested in transitioning into educational positions often did so initially by providing instruction to healthcare students performing clinical rotations in patient

care settings. The next step in the transition occurred when the individuals were offered employment as instructors with accredited programs at colleges or universities (Giordano, 2004; Hilton, 2003).

A novel approach to healthcare educator recruitment was presented by Hilton (2003) and Giordano (2004) who suggested looking within healthcare programs for potential educators. Hilton (2004) recommended identifying students who exhibited strong clinical skills and possessed a thorough understanding of complex theories. Once these individuals were identified, MacKinnon and Leighton (2002) stressed the importance of encouraging these outstanding students to consider careers in education.

When encouraging students, graduates, or others, to consider careers in healthcare education, the literature stressed the importance of promoting the benefits of such a career. Several researchers commented on the flexibility and time off associated with educational positions as primary benefits (Hilton, 2003; MacKinnon & Leighton, 2002; Trossman, 2003). MacKinnon and Leighton (2002) also mentioned that educators could ultimately improve patient care through providing quality instruction. Trossman (2002) identified an additional benefit of an educational career as a means to simply support students throughout their learning and to enjoy student successes. Collectively, these intangible benefits were identified as key recruitment tools.

Healthcare Faculty Retention

The literature clearly identified retention of healthcare faculty as a challenge presently facing healthcare education programs across the nation (Falk, 2007; "Increasing faculty retention," 2009; Starnes-Ott & Kremer, 2007). Falk (2007) observed that many healthcare educators were nearing retirement age and would soon be leaving the profession. Salary discrepancies and unmanageable workloads were also noted as reasons healthcare faculty left academia (Brady, 2007). However, one of the most documented reasons for healthcare faculty attrition was lack of preparation for the role ("Increasing faculty retention," 2009, Schraw & Brooks, n.d.).

Several resolutions to the issue of healthcare faculty retention were presented in the literature. Falk (2007) commented that retiring healthcare educators took years of experience, both classroom and clinical, with them when they left the academic setting; therefore, she suggested that institutions attempt to retain aging faculty by improving work environments and considering financial incentives.

Hessler and Ritchie (2006) asserted the opposite; they stressed the importance of developing and retaining the Generation Xers or those faculty members under the age of 35. It was noted that this particular cluster of healthcare educators had very different priorities; they sought balance between their work and personal lives, wanted success without micromanagement, and required independence in the workplace (Hessler & Ritchie, 2006). In order to retain these individuals, it was suggested to "provide guidance, foster socialization, encourage

flexibility, conduct orientation, provide support, facilitate collaboration, allow for mistakes, coordinate teaching assignments, grow your own, and offer rewards" (Hessler & Ritchie, 2006, p. 150).

With regard to salary discrepancies and unmanageable workload, Spivey et al., (2009) identified the following factors as being significant in the decision of healthcare educators to remain in academia long term:

Both intrinsic [factors] (e.g., advancement and growth opportunities [job security], balance of professional responsibilities [workload], a performance-based system of rewards, level of support for research, relationships with administration and colleagues, level of autonomy) and extrinsic [factors] (e.g. salary level, fringe benefits, geographic location, institution reputation) factors...(p. 61)

Starnes-Ott and Kremer (2007) addressed new faculty retention through the description of a plan that was developed as the result of research within the nurse anesthetist community. This plan included a workshop for new faculty development, a dedicated recruitment effort for the profession to include minorities, and a workforce study (Starnes-Ott &Kremer, 2007). There was no literature available on the implementation and success of this plan.

Characteristics of Effective Healthcare Educators

While the review of the literature mentioned that an interest in teaching often led to satisfied and effective healthcare educators (Hilton, 2003), mastery of the knowledge base and clinical skills associated with the profession were defined as

essential qualities of effective healthcare educators (Levy et al., 2009; Rodgers, Cross, Tanenbaum, & Tilson, 1997). Those healthcare educators who exhibited a command of their respective professional knowledge and skill sets more easily transferred information in the didactic and clinical settings than those educators who demonstrated an inadequate foundational knowledge base and poor clinical skills. However, it was stated that a foundational base in educational strategies such as competency based education and adult learning theories was also necessary for effectiveness in areas such as (a) teaching strategies (Schraw & Brooks, n.d.), (b) lesson planning and classroom management (Baker College, 2005), and (c) student evaluation and assessment (Baker College, 2010; "Increasing faculty retention," 2009).

In addition to the possession of professional knowledge, clinical skills, and educational theory, it was noted that healthcare educators needed to be creative, collaborative, compassionate (Rodgers et al., 1997). Levy et al. (2009) explained the importance of educators who were well organized, professional, ethical, enthusiastic and good communicators. In addition, Hilton (2003) advocated the value of good listening skills. Giordano (2004) pointed out the importance of healthcare educators being proficient in the supervision of students, conflict management, and counseling. And, due to the fact that medical technologies advance at an exponential rate, Hilton (2003) also commented that healthcare educators should be committed to life-long learning.

Healthcare Educator Training and Development

Most healthcare educators were once healthcare providers who functioned daily in competency based environments; however, after transitioning into academia most became acutely aware of their limited knowledge of or lack of theoretical training with regard to educational theory and pedagogy (Levy, Sexton, Willeford, Barnum, Guyer, Gardner, & Fincher, 2009; Misch, 2002; Schraw & Brooks, n.d.). As previously indicated, one means of retaining healthcare faculty was to provide training opportunities for new hires including information on adult learners, competency based education and basic, educational theory ("Increasing faculty retention," 2009).

Adult learning theory.

In the 1970s, Malcolm Knowles was credited with the term andragogy, which he defined as how adults learn (Cyr, 1999). Knowles' initial research was based on five assumptions on how adults preferred to learn. Eventually, this evolved into six assumptions. These assumptions contended that adults (a) had a need to know why they were being ask to learn [need to know], (b) were independent learners [self directed], (c) preferred to incorporate their learning with their life experiences [foundation], (d) preferred learning activities that were relevant to their everyday lives [readiness], (e) appreciated problem centered learning as opposed to subject, or content, centered learning [orientation], and (f) were motivated internally [motivation] (Misch, 2002). As Knowles' researched continued, he established

seven principles for guiding adult learning environments (Kaufman, 2003). These guidelines included:

- Establish an effective learning climate, where learners feel safe and comfortable expressing themselves
- Involve learners in mutual planning of relevant methods and curricular content
- Involve learners in diagnosing their own needs—this will help to trigger internal motivation
- Encourage learners to formulate their own learning objectives—this gives
 them more control of their learning
- Encourage learners to identify resources and devise strategies for using the resources to achieve their objectives
- Support learners in carrying out their learning plans
- Involve learners in evaluating their own learning—this can develop their skills of critical reflection (Kaufman, 2003, p.213).

Kaufman (2003) stated that the gap between adult learning theory and healthcare training could be bridged by applying the appropriate guidelines to instructional strategies. It was his belief that through proper use of adult learning theory healthcare educators could become more effective thus better preparing healthcare graduates and ultimately improving patient care (Kaufman, 2003).

Competency-based healthcare education.

Most healthcare training program curricula were developed utilizing a competency based concept. In the development of such a program, the competency based model required for (a) clear statement of the program's purpose and desired outcomes, (b) identification of competencies which would help learners reach the desired program outcomes, and (c) development of instructional objectives to support acquisition of the knowledge, skills, and attitudes associated with the required competencies (McCowan, 1998). Theoretically, to be considered competency based, a program had to demonstrate the following:

- Clear job descriptions and program outcomes
- Needs assessments based on job-related competencies
- Structured hierarchy of domains, competencies, and objectives
- Instruction based on specific behavioral objectives with opportunity to apply new attitudes, skills, and knowledge
- Post-test assessment and OJT mentoring to assure trainee mastery of essential material. (McCowan, 1998, p.32)

According to the literature, some opposition to competency based education existed based on unclear definitions of competence and the fact that the roots of competence based education were embedded in behaviorism (Kerka, 1998).

Epstein and Hundert (2002) defined professional [medical] competence as "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" (p.226). However, it was also noted that

medical competence depended upon evidence of continued improvement—lifelong learning (Wood, 2009).

Competency based education's connection to behaviorism caused concern for some researchers. Some research asserted that the behaviorist learning theory, which focused on breaking down large tasks into small learning units, resulted in students who concentrated on learning the task and overlooked its underlying meaning or significance (Leung, 2002). This resulted in a student who learned a task, but was unable to think critically (Leung, 2002).

Leung (2002) explained that there were some healthcare training situations which called for a strict behaviorist approach. However, he explained that in most instances, "holistic varieties of the competency based approach" were more appropriate (Leung, 2002). While it was critical for students to learn to perform complex medical tasks in a competent manner, it was equally important for them to learn to think critically in dynamic situations.

Learning theories applied to healthcare education.

Concerning adult education, Brookfield (1987) summarized four areas of primary concern. When applying adult learning theory to educational programs, he explained that (a) self directed learning, (b) critical reflection [transformational learning], (c) experiential learning, and (d) learning to learn were critical components (Brookfield, 1987). It was implied that no single adult learning theory adequately described the experiences associated with andragogy (Merriman, 2001).

Therefore, a blended, or holistic, approach, should be considered as Leung (2002) suggested.

Experiential learning theory (ELT) was originally based on the following six propositions:

Learning is best conceived as a process, not in terms of outcomes; all learning is relearning; learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world; learning is a holistic process of adaptation to the world; learning results from synergetic transactions between the person and the environment; and, learning is the process of creating knowledge. (Kolb & Kolb, 2005, p. 194)

Essentially, ELT was defined as a learning process in which the student continually experienced, reflected, conceptualized, and experimented or practiced—just as healthcare students would in a clinical setting (Maudsley & Strivens, 2000).

Transformative learning was defined as how adults learned by interpreting, confirming, and reformulating the meaning of their experiences through the concepts of "centrality of experience, critical reflection, and rational discourse" (Imel, 1998, p. 2). Merriam (2004) explained that transformative learning required a student who functioned at a higher cognitive level, initially. As a student engages in transformative process, he or she should be able to demonstrate improved abilities to assess assumptions, recognize frames of reference, and work collaboratively to solve problems (Mezirow, 1997).

The competency based framework utilized by most healthcare training programs provided the basis for objective-oriented learning (McCowan, 1998) which

allowed for the development of essential skills and knowledge. However, to ensure competency with regard to skills, knowledge, and attitudes, competency based healthcare training programs might best be served to consider a more inclusive approach with regard to learning theories (Leung, 2002), such as the blending of experiential learning theory and transformative learning.

Connecting competency based education and learning theories.

The relationship between competency-based education and adult learning theories has been identified as a critical component of new healthcare faculty development ("Increasing faculty retention," 2009). It was noted that a specific knowledge of how adults learn should be translated into effective delivery of competency based education (Kaufman, 2003). This link was identified as critical because competency based education provided healthcare students, who were defined as adult learners, with competencies and standards of measurement to be achieved (Voorhees, 2001). Additionally, given the fact that the literature had difficulty defining competence and that competence was often solely perceived by an evaluator, it has been characterized as an 'inferred quality' thus supporting the importance of recognizing and embedding adult learning theories into competency based healthcare training programs (Epstein & Hundert, 2002).

In Brookfield's (1987) work with adult learning, which focused on self directed learning, critical reflection [transformational learning], experiential learning, and learning to learn, it was implied that no single adult learning concept adequately described the experiences associated with andragogy (Merriman, 2001). Thus,

competency-based education could be characterized as a blending of experiential and transformational learning (Cantor, 1997).

Epstein and Hundert (2002) remarked that healthcare competence was "more than a demonstration of isolated competencies" (p. 227); they described clinical competence as a developmental learning process. According to the literature, clinical competence emerged as a result of learning where the student had applied clinical abilities to specific tasks and depended upon habits of mind (attentiveness, self-awareness, curiosity) to recognize and correct errors (Epstein & Hundert, 2002). The importance of therapeutic relationships with the patients and affective and moral domains were also documented (Epstein & Hundert, 2002). Kingsnorth-Hinrichs (2009) added that learning for competence often involved unique activities. In some instances, learners were mentored by experienced staff; in other situations, the learners were actively engaged in teaching others (Kingsnorth-Hinrichs, 2009).

McMillan, Bell, Benson, Mandzuk, Matias, McIvor, Robertson, and Wilkins (2007) summarized the significance of theory application or clinical competence while emphasizing the importance of incorporating adult learning theories into competency based in order to promote learning and ensure competence (McMillan et al., 2007). Levy et al. (2009) further explained that by integrating adult learning theories into competency based curricula, students were able to become more fully engaged in the learning process, thus supporting growth in both the critical thinking and competency areas.

A sampling of training and development programs.

Starnes-Ott and Kremer (2007) stated that being a good clinician does not always translate into being a good educator. They explained that transitioning into an academic setting required a "change in knowledge, skills, behaviors, and values, to prepare for the new assimilated roles, settings, and goals shared by the new reference group" (p. 13). To assist the healthcare educator in making such changes, there were several training and development models identified in the literature.

Schraw and Brooks (n.d.) described a faculty development model entitled the Interactive Compensatory Model of Learning (ICML). The ICML was designed to provide a basis for appreciating and enhancing classroom learning; the instructional modules were developed to cover cognitive abilities, knowledge base, teaching strategies, metagcognition, and motivation (Schraw & Brooks, n.d.). Strategies were also provided for improving each of the categories included in the ICML program (Schraw & Brooks, n.d.)

The Clinical Faculty Academy (CFA) developed by the Collegiate Nurse Educators of Greater Kansas City, the Kansas City Area Nurse Executives, and The Health Allliance of MidAmerica was a comprehensive training opportunity presented in the literature ("Increasing faculty retention," 2009). The CFA was described as a two-day professional development program which provided training in curriculum design, instruction in a clinical setting, legal issues, student assessment, transitioning from healthcare provider to healthcare educator, and conflict management ("Increasing faculty retention," 2009). The programs that have

participated in the CFA have not only documented satisfactory faculty development through evaluations, but have also documented retention rates of 25% or better ("Increasing faculty retention," 2009).

The Effective Teaching and Learning Department of Baker College in Michigan developed a course for new faculty (Baker College, 2005). This comprehensive course was described as student centered and was developed based on theories offered by Bloom, Kolb, and Gagne (Baker College, 2005). The course covered instructional activities specific to adult learners such as lesson planning and classroom management (Baker College, 2005). In addition, the college developed a comprehensive, online supplementary website to support new faculty. This website was designed to include additional information on student evaluation and assessment and multimedia equipment and the use of technology in the classroom (Baker College, 2010).

Sorcinelli (1994) and Starnes-Ott and Kremer (2007) suggested the use of mentoring and centers for teaching and research in the development of new faculty. It was noted that mentoring, both formal and informal programs, promoted greater faculty success in that mentored faculty better understood the organizational culture and academic processes (Starnes-Ott & Kremer, 2007). Teaching and research centers were defined as service areas where new faculty received educational assistance with "curriculum development, instructional techniques, and how to incorporate technology into their courses" (Starnes-Ott & Kremer, 2007, p. 16).

The training and development programs presented here represent only a sampling from the literature. The components of the programs included varied

greatly. However, they were designed with a common goal—new healthcare faculty development and retention.

Summary

In reviewing related literature, this chapter attempted to extrapolate causative factors and resolution strategies, where appropriate, related to the current healthcare educator shortage. Based on this review of the literature, this information is best summarized in four categories of causative factors: economics, preparation standards, attrition, and benefits of healthcare education. The research questions and methodology were designed to elicit data which will enhance or refute this existing literature. The relationship of the causative factors to the research questions is summarized in Table 2.1.

Table 2.1
Relationship between Research Questions and Causative Factors

Relationship between Research Questions and Causative Factors				
Research Question	Causative Factor(s)			
RQ1: What factors do healthcare educators identify as being most influential in their decision to transition from healthcare provider to healthcare educator?	Benefits of healthcare education			
RQ2: What factors do healthcare educators identify as being the most conducive for preparation in a career in healthcare education?	Preparation standards			
RQ3: What factors do healthcare educators identify as being the least conducive for preparation in a career in healthcare education?	Economics and attrition			
RQ4: What factors do healthcare educators identify as being most influential in their decision to remain in education long-term?	Attrition and benefits of healthcare education			
RQ5: What demonstrated behaviors cause one to be an effective healthcare educator?	Preparation standards			

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter describes the design and methods used to collect and evaluate data from healthcare providers who have transitioned into educational leadership roles. An overview of the procedures used to conduct the study, including the population, sampling strategy, instrumentation, and data collection methods is discussed in this chapter. The purpose of this study was to identify effective methodologies which would assist healthcare providers transitioning into educational leadership positions by identifying strategies relating to development and ultimately retention of those individuals. The study (a) identified effective strategies which promoted and supported the development of skills needed for success in the classroom, (b) evaluated perceptions of healthcare educators as to factors which would encourage an interest in transitioning into a career in education and which factors would and/or did encourage a long-term commitment to an educational career, (c) evaluated perceptions of healthcare educators as to the factors which are most effective in aiding transitioning from the healthcare environment to the educational arena, and (d) evaluated perceptions of healthcare educators as to factors which define effective healthcare instruction.

Design

This study was descriptive in nature (McMillan & Schumacher, 2006) and utilized a mixed methods approach (Creswell, 2008) to identify a number of variables associated with the transition from healthcare provider to healthcare educator and to identify healthcare educators' perceptions of effective instruction. The quantitative aspect of the study was used to collect demographic data along with data to support selected research questions; the qualitative data were gathered to enrich the quantitative data (Creswell, 2008).

Research Questions

The research questions directing this study were:

Research Question 1: What factors do healthcare educators identify as being most influential in their decision to transition from healthcare provider to healthcare educator?

Research Question 2: What factors do healthcare educators identify as being the most conducive for preparation in a career in healthcare education?

Research Question 3: What factors do healthcare educators identify as being the least conducive for preparation in a career in healthcare education?

Research Question 4: What factors do healthcare educators identify as being most influential in their decision to remain in education long-term?

Research Question 5: What demonstrated behaviors cause one to be an effective healthcare educator?

Institutional Review Board Approval

Before data collection began, Institutional Review Board (IRB) approval from the University of Tennessee at Chattanooga (UTC) was sought. Based on published guidelines at UTC, IRB approval was applied for and received. No data were collected until IRB approval had been obtained. Approval from the IRB can be found in Appendix A.

Population and Sample

The population for this study was comprised of healthcare educators employed in regionally accredited colleges and/or universities throughout the United States. A typical sampling technique was utilized in that individuals were selected to participate who documented experience as healthcare educators within selected healthcare programs offering certificate, associate, or bachelor degrees (Creswell, 2008). The healthcare programs selected for inclusion in this study were dental (assistant and hygiene), emergency medicine-paramedic, health information management, nursing, pharmacy technology, radiologic technology imaging (to include, where applicable, diagnostic medical sonography, nuclear medicine technology, and radiation therapy), rehabilitation therapy assistant (occupational and physical), and respiratory care.

During the initial conceptualization of this research, it was determined that the population would be defined utilizing the databases of the six regional accrediting agencies. Internet searches were made of every accredited college and university to identify accredited institutions which sponsored the defined healthcare

programs. As this was completed, it was noted that while the process ensured institutional accreditation, it did not guarantee programmatic accreditation. This realization led to a re-conceptualization of the definition of the population, moving from a focus on accredited institutions to accredited healthcare programs.

The website for the specialty accrediting agency for each of the identified healthcare programs was visited and a listing of accredited programs for each program area was generated. Once compiled, this comprehensive listing was cross referenced with the databases of the six regional accrediting agencies to ensure that each program was sponsored by an accredited college or university. This process provided an efficient means of defining a population of accredited healthcare programs sponsored by regionally accredited colleges/universities across the United States. The population data base can be found in Appendix B.

The defined population included 1225 regionally accredited colleges, junior colleges, universities, and medical centers which sponsored healthcare training programs in dental (assistant and hygiene), emergency medicine-paramedic, health information management, nursing, pharmacy technology, radiologic technology imaging (to include, where applicable, diagnostic medical sonography, nuclear medicine technology, and/or radiation therapy), rehabilitation therapy assistant (occupational and/or physical), and respiratory care. To select a sample for the study, criteria were established. The criteria for inclusion in the study were: (a) that the sponsoring institution be regionally accredited and the healthcare program be accredited by the appropriate specialty agency (this had been verified via the compilation of the population spreadsheet data), (b) that the sponsoring institution

be of a college or university status (thus eliminating hospital-based programs and military installations), and (c) that the institution sponsored five or more of the identified healthcare training programs. There was no sampling technique applied to this population, all institutions within the population who met the criteria were included in the study. The sample database can be found in Appendix C.

The sample size included 98 colleges/universities which were located in 35 of the 50 states (Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin, and Wyoming). The number of healthcare programs sponsored by each of the institutions within the sample size varied from five to eleven and totaled 657. The programmatic cross-sectional representation within the sample is summarized in Table 3.1.

Table 3.1 Cross-sectional Representation of Healthcare Programs Included in Sample

Program	Number in Sample
Dental (Assisting, Hygiene)	111
Emergency Medicine Paramedic	44
Health Information Management/Technology	51
Nursing	91
Pharmacy Technology	27
Radiology Technology (Sonography, Nuclear	138
Medicine, Radiography, Radiation Therapy)	
Rehabilitation Therapist Assistant	109
(Occupational/Physical)	
Respiratory Care	86
Total	657

The initial number of participants represented within the sample was estimated. If only the primary faculty member (administrative personnel) within the programs was to complete the survey, the study participants would number 657; however, should additional faculty exist and be included in the study, the sample size was estimated to increase to as many as 1587. The later sample size was based on the estimation of two faculty members per program with the exception of nursing which was estimated at five faculty members per program. The estimated number of study participants per program is summarized in Table 3.2.

Table 3.2 Estimated Number of Study Participants

Program	Primary Faculty	Primary and
	Only	Other Faculty
Dental (Assisting, Hygiene)	111	222
Emergency Medicine (Paramedic)	44	88
Health Information Management/Technology	51	102
Nursing	91	455
Pharmacy Technology	27	54
Radiology Technology (Sonography,	138	276
Nuclear Medicine, Radiography, Radiation Therapy)		
Rehabilitation Therapist Assistant (Occupational/Physical)	109	218
Respiratory Care	86	172
Total	657	1587

Data Collection Instrument

An online survey was developed by the researcher to collect both quantitative and qualitative data. The quantitative portion of the instrument was designed to gather demographic and other relevant data to substantiate the identified research questions. Additional open-ended questions were designed and included to gather qualitative data to enrich the quantitative data. The questionnaire in its original format can be found in Appendix D.

A panel of 12 healthcare educators reviewed the data collection instrument to ensure the content validity (Creswell, 2008). They were given a brief overview of the research project, a description of the population and sample, the research questions, and the survey. They were then asked to review the survey to ensure that it was consistent with the established research questions. Related peer review email correspondence may be found in Appendix E. Based on input received from

the panel of healthcare educators, the survey was revised and updated. The finalized online survey may be found in Appendix F.

Following the content validity review, a pilot test of the study was conducted (Patten, 2005). The purpose of this pilot test was to ensure that the online survey link was functional, the survey content was clear and logical, and the methodology for data collection was feasible. The pilot test was conducted with an accredited institution which sponsored five of the identified healthcare programs (nursing, pharmacy technology, radiologic technology imaging, nuclear medicine technology, and rehabilitation therapy assistant—physical). In addition to answering the survey questions, participants were asked to evaluate the instrument and return any comments to the researcher via email (Creswell, 2008). Pilot testing email correspondence can be found in Appendix G. A total of six pilot test surveys were returned; however no email comments were received. The survey was not modified as a result of the pilot test.

Methodology

An introductory email was sent to the healthcare dean/department head of each college/university chosen to participate. This explained the research project, requested the participation of the appropriate faculty, and provided instructions for completion of the online survey. The invitation to participate email can be found in Appendix H. Two weeks later, a reminder email was sent to prompt non-responders into participating. The reminder to participate email can be found in Appendix I.

Data Analysis

A statistical package included with the online survey builder software and SPSS were used for analyzing the quantitative data. Descriptive statistics was used to present the demographic data collected; inferential statistics was used to compare data collected between groups and to relate assorted variables (Creswell, 2008). For all demographic information, data were presented in frequencies and percentages. The mean and standard deviation were also calculated and presented, where applicable. When comparing data between groups, chi squares were calculated and presented.

The qualitative data were analyzed manually. A template analysis approach was utilized; the qualitative data were categorized and coded throughout the data collection process (McMillan & Schumacher, 2006). This allowed flexibility during the extraction of the results. Emerging patterns were identified and a summation of emergent themes was developed for each open-ended question.

Summary

This chapter provided an outline for the research study methodology. The design of the study and the research questions guiding it were reviewed. A brief explanation of the IRB process was included. The population and sample were described as was the method of participant selection. A description of the data collection instrument and its development was provided. Finally, the methodology associated with data collection was discussed and an overview of data analysis was provided.

CHAPTER 4

RESULTS

Introduction

This chapter is organized in terms of response rate, data collected, and data generated via statistical analysis to substantiate the established research questions. The foremost portion of the chapter addresses the study's response rate, demographic data, and the participants' responses to the survey. The chapter concludes with the reporting of statistical analysis completed on the collected data retaining to the study's research questions.

Many healthcare programs have documented difficulty in recruiting, developing, and retaining qualified healthcare educators. As documented in recent literature, this difficulty, along with other factors, has created an educator shortage which is expected to worsen in the near future. The purpose of this study was to identify effective methodologies to assist healthcare providers who transition into the academic setting by identifying strategies relating to the development and retention of those individuals.

Response Rate

As discussed previously, the number of potential participants for this study was estimated. If only the primary faculty member (administrative personnel) within the programs was to complete the survey, the study participants would number 657; however, should additional (secondary) faculty exist and be included in the study, the sample size was estimated to increase to as many as 1587. The later sample size was based on the estimation of two faculty members per program with the exception of nursing which was estimated at five faculty members per program, because typically nursing programs are larger and employ more faculty.

There was no differentiation made on the survey as to classification of the faculty with regard to primary (administration) or secondary (instructional support). The estimated number of study participants, actual responses received, and corresponding percentages are presented in Table 4.1.

Table 4.1
Estimated Number of Study Participants, Actual Survey Responses, and
Corresponding Percentages

Corresponding Foreontages					
Study Participants	Estimated Number	Total Responding	Percentage		
	110111001	rtooponanig			
Primary Faculty	657	231	35		
Primary and Secondary Faculty	1587	231	15		

Demographic Data

There were 231 individuals who participated in this research study; 185 (80%) were women and 46 (20%) were men. The majority (76%) of the participants were older than age 46. Table 4.2 demonstrates the age distribution.

Table 4.2
Age Distribution of Survey Participants

rigo Biotilization of Carroy Latticipante					
Age	Frequency	Percentage			
25 or below	0	0			
26-35	11	5			
36-45	43	19			
46-55	93	40			
56 or over	83	36			
Total	230	100			

The data demonstrated that the highest level of education completed by the majority (57%) of the survey participants was a master's degree. Those who selected the 'other' category indicated degrees as follows: working towards bachelor's, bachelor's plus certification, education specialist, or engaged in doctoral studies. The highest level of education of the participants was close to normal distribution (Creswell, 2008) as illustrated by Figure 4.1.

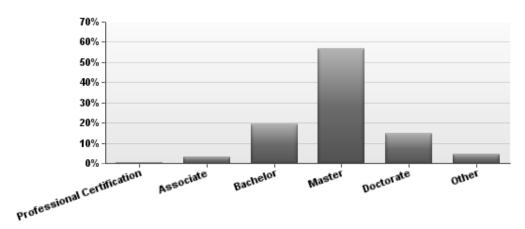


Figure 4.1 Distribution of survey participants based on highest level of education

The number of years of experience in healthcare education of the survey participants was more evenly distributed between the age categories. However,

those individuals with 6-10 years of experience and those with 26 years or more recorded the greatest number of responses with 54 (23%) and 48 (21%), respectively. This is illustrated by Figure 4.2.

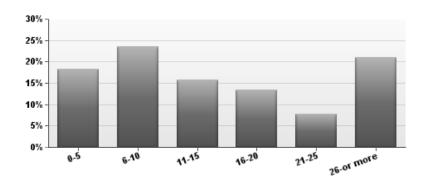


Figure 4.2 Years of experience in healthcare education of survey participants

An overwhelming majority 222 (97%) of the survey participants indicated that they were employed in healthcare education full-time. Only three part time educators (1%) and five adjunct instructors (2%) responded to the research survey. Of those participating, 137 (60%) indicated that they were in tenure track positions. The remaining 91 (40%) indicated that tenure was not available at their institutions. Of those in tenure track positions, 93 (41%) indicated they were fully tenured and 44 (19%) stated they were working toward tenure.

Participants came from 25 of the 35 states where the selected institutions were located (Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee,

Texas, Utah, Virginia, Washington, Wisconsin, and Wyoming). Despite the geographic location, the majority 211 (92%) of the participants indicated that their respective area of expertise participated in programmatic, specialty accreditation.

The healthcare programs represented in the data were unequally distributed with regard to training specialty. Based on program distribution, nursing was represented by the largest number of survey participants with 70 (31%) followed by radiologic technology with 46 (20%). The program with the least representation was pharmacy technology with 2 (1%).

Those who selected the 'other' category (19%), typed in programs such as pharmacy, physical therapy, radiography, and sonography, which were programs provided as choices in the original question. Others, however, provided classification as follows: administration, 10 (23%), medical laboratory, 5 (12%), medical assisting 5 (12%), surgical technology, 4 (9%), nutrition, 3 (7%), veterinary technology, 2 (5%), communications, 1 (2%), medical terminology, 1 (2%), and physician assistant 1 (2%) and 3 (7%) marked other but failed to provide a program affiliation. This is demonstrated by Table 4.3.

Table 4.3
Distribution Survey Participants by Healthcare Program

, , ,		
Healthcare Program	Frequency	Percentage
Dental (Assisting, Hygiene)	19	8
Emergency Medicine (Paramedic)	10	4
Health Information Management/Technology	10	4
Nursing	70	30
Pharmacy Technology	2	1
Radiologic Technology (Sonography,	46	20
Nuclear Medicine, Radiation Therapy)		
Rehabilitation Therapist Assistant	15	7
(Occupational, Physical)		
Respiratory Care	15	7
Other	43	19
Total	230	100

Participants were asked if they had completed any educational theory courses prior to transitioning into healthcare education. The responses were nearly evenly divided with 123 (54%) responding yes and 105 (46%) responding no.

To investigate training provided at the time of transition into healthcare education, participates were asked to describe opportunities that were made available to them at the time of their initial employment. A total of 197 participant responses was recorded. From the responses, a total of 263 themes was coded and categorized. Based on frequency of occurrence, the emergent themes included: (a) no training offered, 59 (22%), (b) mentoring, 48 (18%), (c) various college in-services, 47 (18%), and (d) general orientation sessions, 35 (13%).

The mentoring activities mentioned by respondents ranged from casual peer mentoring to formal mentoring programs. Regardless of the setting, many of the respondents indicated positive experiences from the mentoring activities. One individual stated, "My teaching partner was a great mentor." Others, however,

indicated less than notable experiences, as one respondent stated, "There was a general orientation and you had a faculty mentor. The amount of help that you got varied greatly on your mentor."

The college in-services covered a diverse array of activities. These activities were defined as brief courses offered by the college or university. A few of the inservice programs mentioned by the respondents focused on job responsibilities such as student advising and registration. However, the majority of the activities which were documented focused on faculty development. Topics included classroom dynamics, writing across the curriculum, engaging the student, cultural diversity, and rubrics.

The orientation sessions described by the respondents ranged from college orientation which provided information on college policies to new faculty orientation which, in some cases, provided information for those new to the world of academia. One respondent described a "course in teaching, short duration, on-campus. Very helpful." Another described participating in "32 hours of orientation followed by monthly orientation meetings." While yet another remarked, it was "just the usual orientation."

A complete listing of training opportunities offered to healthcare educators at the time of their initial employment can be found in Appendix J; the complete listing of emergent themes can be found in Appendix K.

As a follow-up, participants were asked to comment on the training opportunities they believed would have provided the greatest benefit as they transitioned into their new role as a healthcare educator. A total of 181 participant

responses was recorded. From the responses, a total of 204 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) mentoring, 61 (30%), (b) educational courses, 55 (27%), and (c) orientation, 24 (12%).

Of those remarking on mentoring activities, some simply wished for guidance by seasoned educators as indicated by the following comments:

- mentoring by experienced educators in the field
- having a mentor to whom I could go with questions was valuable
- strong peer mentoring
- mentoring with other full-time Allied Health faculty

Others suggested that a more defined, formal mentoring program was needed.

One respondent commented, "A real mentor would have helped and meetings/guidance from that mentor on a weekly basis." Another indicated that he or she would have benefited from "a better mentoring experience...more formalized." One respondent pointed out the need for "being mentored clinically."

With regard to the educational courses, respondents suggested a variety of topics. Most of the suggested topics were theoretical in nature. A sampling of the topics included: adult learning theories, competency based education, curriculum development, and assessment. Additionally, respondents indicated the need to gain knowledge of classroom management skills, conflict management, lecturing techniques, abnormal psychology, and educational research.

Limited information was provided on the orientation sessions that were needed. Many of the responses were general in nature and simply stated that an

orientation was needed. Others, however, provided more specific information, as follows:

- I think a broader picture about the institution and a more specific orientation to the role the employee is expected to perform may have been of assistance.
- better college orientation; better program orientation.
- an orientation to academia
- orientation to clinical evaluation

A complete listing of the training opportunities desired by healthcare educators can be found in Appendix L; the complete listing of emergent themes can be found in Appendix M.

Research Questions

The research questions directing this study were:

Research Question 1: What factors do healthcare educators identify as being most influential in their decision to transition from healthcare provider to healthcare educator?

Research Question 2: What factors do healthcare educators identify as being the most conducive for preparation in a career in healthcare education?

Research Question 3: What factors do healthcare educators identify as being the least conducive for preparation in a career in healthcare education?

Research Question 4: What factors do healthcare educators identify as being most influential in their decision to remain in education long-term?

Research Question 5: What demonstrated behaviors cause one to be an effective healthcare educator?

Data Relating to Research Questions

Research Question 1.

In response to Research Question 1, participants were asked to identify how influential a list of factors was in their decision to transition from the clinical setting into the academic setting. They were asked to rate each factor on a Likert scale of strongly agree (1), agree (2), neither agree nor disagree (3), disagree (4), or strongly disagree (5).

Based on the data, it was demonstrated that the two factors which were most influential in healthcare providers decision to transition into the academic setting were (a) the devotion the profession and the desire to promote it and (b) the satisfaction received by teaching. In combining the strongly agree and agree responses, those two categories recorded 215 (95%) and 213 (94%) of the responses, respectively. That factor which the least influence in their decision to transition into healthcare education was salary as only 62 (28%) strongly agreed or agreed. The factors and associated results can be found in Table 4.4.

Table 4.4
Factors Influencing the Transition from Clinical Setting to Academic Setting

			Neither				
Factor	Strongly Agree n (%)	Agree n (%)	Agree nor Disagree n (%)	Disagree n (%)	Strongly Disagree n (%)	Mean	Standard Deviation
appeal of academic benefits (schedule/holidays)	100 (44)	78 (34)	36 (16)	8 (4)	5 (2)	1.85	.96
devotion to your profession and desire to promote it	137 (60)	78 (35)	9 (4)	2 (1)	1 (.004)	1.47	.66
satisfaction received by teaching	152 (67)	61 (27)	12 (5)	0 (0)	2 (1)	1.41	.67
opportunity to further education (obtaining an advanced degree)	72 (32)	56 (25)	71 (31)	14 (6)	13 (6)	2.29	1.15
desire to change careers	48 (21)	72 (32)	56 (25)	37 (16)	15 (7)	2.56	1.18
salary	17 (7)	45 (20)	58 (26)	62 (27)	44 (19)	3.31	1.21

Chi square tests were performed to further evaluate these data with regard to age, highest level of education, and years of experience in healthcare education.

Tables 4.5, 4.6, and 4.7 demonstrate the chi square data for age, highest level of education, years of experience respectively. The chi square data presented in Table 4.5 demonstrated that there was no statistical relationship between age and the six factors influencing healthcare providers' decisions to transition into academia.

Table 4.5
Chi Square Data Relating Age and Factors Influencing Decision to Transition into Healthcare Education

	are Education	Degrees	
Factor	Chi Square	of Franksm	p-value
appeal of academic benefits (schedule/holidays)	12.581	Freedom 12	.40
devotion to your profession and desire to promote it	11.395	12	.50
satisfaction received by teaching	6.137	12	.73
opportunity to further education (obtaining an advanced degree)	13.846	12	.31
desire to change careers	14.587	12	.27
salary	14.935	12	.25

The chi square data presented in Table 4.6 demonstrated that the highest degree of education had an impact on only one of the six factors influencing healthcare providers' decisions to transition into academia—devotion to one's profession and the desire to promote it. According to the chi square data, of those holding a bachelor's degrees or higher all were influenced by the devotion to their

profession and eager to promote it to others with the exception of eleven individuals; nine were neutral and two disagreed. There was no statistical relationship between educational level and the other five factors.

Table 4.6
Chi Square Data Relating Highest Level of Education and Factors Influencing
Decision to Transition into Healthcare Education

		Degrees	
Factor	Chi Square	of Freedom	p-value
appeal of academic benefits (schedule/holidays)	21.386	20	.38
devotion to your profession and desire to promote it	35.592	20	.02
satisfaction received by teaching	16.694	20	.34
opportunity to further education (obtaining an advanced degree)	14.071	20	.83
desire to change careers	16.034	20	.72
salary	12.630	20	.89

The chi square data presented in Table 4.7 demonstrated a relationship with years of experience and only one of the six factors influencing healthcare providers' decisions to transition into academia—salary. When comparing this data with Table 4.4, it appeared as though the same relationship occurred collectively with those healthcare educators who responded neutrally 58 (26%), disagree 62 (27%), and strongly disagree 44 (19%) to the same category—salary. There was no statistical relationship between educational level and the other five factors.

Table 4.7
Chi Square Data Relating Years of Experience in Healthcare Education and Factors
Influencing Decision to Transition into Healthcare Education

		Degrees	
Factor	Chi Square	of	p-value
		Freedom	
appeal of academic benefits (schedule/holidays)	23.310	20	.27
devotion to your profession and desire to promote it	22.693	20	.30
satisfaction received by teaching	14.616	20	.48
opportunity to further education (obtaining an advanced degree)	21.467	20	.37
desire to change careers	21.401	20	.37
salary	32.458	20	.04

As a follow-up, an open-ended question was included which asked the participants to identify any other factor, not listed on the survey, which influenced their decision to transition from the clinical setting into the academic setting. A total of 92 participant responses was recorded. From the responses, a total of 101 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) love of teaching, 15 (15%), (b) desire to escape the physical demands of the clinical setting, 10 (10%), (c) desire to influence graduates, 9 (9%), (d) desire to promote the profession, 8 (8%), (e) opportunity to change careers or take on a new challenge, 7 (7%), (f) no additional factors were identified, 7 (7%), and (g) clinical burnout, 6 (6%).

Although respondents were asked to identify factors other than those listed on the survey, three of prominent emergent themes were repeated from the survey

categories—love of teaching, desire to promote the profession, and opportunity to change careers or take on a new challenge. According to Table 4.4, these three themes also documented combined (strongly agree and agree) percentages greater than 50% as follows: love of teaching (94%), desire to promote the profession (95%), and opportunity to change careers or take on a new challenge (53%).

The most prominent emergent theme was the love of teaching. One individual stated, "I was drawn to the 'teacher' role all the while I was in practice. I always knew someday I would teach full time." A number of healthcare educators indicated that they enjoyed teaching students while working in the clinical setting. One respondent remarked, "I fell in love with teaching as an adjunct." Another asserted, "I feel that education is in my soul."

The desire to escape the physical demands of the clinical setting was another prominent emergent theme identified. Physical injury, disability, and decline of physical stamina were noted by three respondents. One individual indicated that with age, he or she was finding "it more difficult to meet the physical demands" of clinical work. Another remarked that the clinical assignment "was the hardest job [he or she] ever had."

A number of individuals expressed the desire to influence graduates. One respondent expressed a desire to "to promote quality care to our future technologists." Another articulated the "desire to impact students to become compassionate caring nurses." Yet another explained the importance of "teaching them [students] to become leaders, to have compassion, integrity, a strong work ethic, and moral character."

The desire to "promote and encourage traditional and non-traditional students into a healthcare profession" was also mentioned. Several individuals saw education as a means of giving back to the profession. One healthcare provider expressed the "desire to 'give back' to the profession in which I have experienced tremendous success and satisfaction." This individual went on to describe how he or she wanted to be part of delivering the education to the next generation of healthcare providers.

One individual described the transition into healthcare education as an opportunity to expand professional horizons. Another just wanted "the challenge of teaching." And, a few others simply expressed the "desire for a new challenge."

Clinical burnout was also noted as a factor which influenced healthcare providers to transition into academia. One respondent explained that after 21 years of employment at a major hospital he or she transitioned into academia to avoid a transition into hospital management. Another simply declared "burnout from direct patient care setting" as the reason for making the transition. One respondent expressed frustration with "the political games involved with healthcare and the emphasis being made towards making money and not helping patients." Another individual simply stated, "I'm really sick of hospitals."

A complete listing of the other factors which influenced the healthcare providers to transition into the academic setting can be found in Appendix N; the complete listing of emergent themes can be found in Appendix O.

Research Question 2.

In response to Research Question 2, participants were asked to review a list of factors and respond as to whether or not they found them conducive to their preparation as they transitioned into their current position as healthcare educators.

Again, they were asked to rate each factor on a Likert scale of strongly agree (1), agree (2), neither agree nor disagree (3), disagree (4), or strongly disagree (5).

Based on the data, it was noted that the most conducive factor in preparing for a healthcare educator position was previous clinical work experiences. In combining the strongly agree and agree responses, this category recorded 214 (94%) of the responses. Modeling instructor behaviors from previous academic experiences, previous theoretical educational training, and assistance from colleagues, supervisors, and/or dean were also noted as conducive factors. When combining the strongly agree and agree responses, these categories recorded 178 (79%), 177 (78%), and 161 (71%), respectively. The factors and associated results can be found in Table 4.8.

Table 4.8
Conducive Factors in Preparing for a Position in Healthcare Education

	<u>ve i dotoro iri</u>		Neither				
Factor	Strongly		Agree nor		Strongly	Mean	Standard
. 5.5.5.	Agree	Agree	Disagree	Disagree	Disagree		Deviation
your previous theoretical educational training	n (%) 82 (36)	n (%) 95 (42)	n (%) 29 (13)	n (%) 17 (8)	n (%) 3 (1)	1.96	.96
modeling instructor behaviors from your previous academic experiences	65 (29)	113 (50)	29 (13)	13 (6)	6 (3)	2.04	.94
your previous clinical work experiences	136 (60)	78 (34)	7 (3)	3 (1)	3 (1)	1.50	.74
assistance from colleagues, supervisors, and/or dean	72 (32)	89 (39)	43 (19)	15 (7)	8 (4)	2.11	1.04
college sponsored professional development activities	41 (18)	80 (35)	67 (30)	34 (15)	5 (2)	2.48	1.02
continuing education activities provided by your professional organization	44 (19)	83 (37)	73 (32)	19 (8)	8 (4)	2.40	1.01
mentoring activities	45 (20)	79 (35)	67 (30)	26 (12)	9 (4)	2.45	1.06
pursing an advanced degree	74 (32)	72 (32)	57 (25)	13 (6)	12 (5)	2.20	1.11

Chi square tests were performed to further evaluate these data with regard to age, highest level of education, and years of experience in healthcare education.

Tables 4.9, 4.10, and 4.11 demonstrate the chi square data for age, highest level of education, years of experience respectively.

The chi square data presented in Table 4.9 demonstrated that there was no statistical relationship between age and the conducive nature of the eight factors in the preparation for a position in healthcare education.

Table 4.9
Chi Square Data Relating Age and Conducive Factors in Preparing for a Position in Healthcare Education

		Degrees	
Factor	Chi Square	of	p-value
		Freedom	
previous theoretical educational training	15.847	12	.20
modeling instructor behaviors from previous academic experiences	12.695	12	.39
previous clinical work experiences	11.277	12	.51
assistance from colleagues, supervisors, and/or dean	8.790	12	.72
college sponsored professional development activities	10.934	12	.54
continuing educational activities provided by your professional organization	6.724	12	.88
mentoring activities	5.396	12	.94
pursing an advanced degree	11.759	12	.47

The chi square data presented in Table 4.10 demonstrated that there was no statistical relationship between highest level of education and the conducive nature of the eight factors in the preparation for a position in healthcare education.

Table 4.10
Chi Square Data Relating Highest Level of Education and Conducive Factors in Preparing for a Position in Healthcare Education

	Degrees		
Factor	Chi Square	of .	p-value
		Freedom	
previous theoretical educational training	30.422	20	.06
modeling instructor behaviors from previous academic experiences	21.123	20	.39
previous clinical work experiences	19.719	20	.48
assistance from colleagues, supervisors, and/or dean	14.102	20	.83
college sponsored professional development activities	23.811	20	.25
continuing educational activities provided by your professional organization	16.435	20	.69
mentoring activities	13.460	20	.86
pursing an advanced degree	23.605	20	.26

The chi square data presented in Table 4.11 demonstrated that there was no statistical relationship between years of experience in healthcare education and the conducive nature of the eight factors in the preparation for a position in healthcare education.

Table 4.11
Chi Square Data Relating Years of Experience in Healthcare Education and Conducive Factors in Preparing for a Position in Healthcare Education

Factor	Chi Square	Degrees of	p-value
	On Oquaic	Freedom	p value
previous theoretical educational training	10.235	20	.96
modeling instructor behaviors from previous academic experiences	10.128	20	.97
previous clinical work experiences	15.868	20	.72
assistance from colleagues, supervisors, and/or dean	24.860	20	.21
college sponsored professional development activities	16.755	20	.67
continuing educational activities provided by your professional organization	21.063	20	.39
mentoring activities	24.938	20	.20
pursing an advanced degree	25.961	20	.17

As a follow-up, an open-ended question was included which asked the participants to identify any other factor, not listed on the survey, which they found conducive in their preparation for a position as a healthcare educator. A total of 40 participant responses was recorded. From the responses, a total of 43 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) no other conducive factors were identified, 10 (23%), (b) clinical experience, 3 (7%), (c) assistance from colleagues, 3 (7%), and (d) pursuing or having an advanced degree, 3 (7%).

A number of respondents (23%) did not identify any additional conducive factors in their preparation for healthcare education. And, although respondents were asked to identify factors other than those listed on the survey, the next three prominent emergent themes were repeated from the survey categories—clinical experience, assistance from colleagues, and pursuing or having an advanced degree. According to Table 4.8, these three themes also documented combined (strongly agree and agree) percentages greater than 50% as follows: clinical work experience (94%), assistance from colleagues (71%), and pursuing or having an advanced degree (64%).

Clinical experience was the most prominent theme which emerged from this open-ended question. One healthcare educator stated, "My overall clinical experience was the most useful experience I had. I would advise any health care professional in education to spend at least five years in the clinical setting." Other healthcare educators credited colleagues with assisting them during their transition from the clinical to the academic setting. They identified things such as "interactivity with colleagues", "informal discussions of teaching [with colleagues]", and "contacting colleagues at other institutions." Finally, pursuing or having an advanced degree had an impact on many healthcare educators and their preparation. One respondent stated, "My PhD program helped me learn to teach." Another explained, "The Master's degree I received included classes that specifically focused on nursing education."

A complete listing of conducive factors in preparation for a position as a healthcare educator can be found in Appendix P; the complete listing of emergent themes can be found in Appendix Q.

Research Question 3.

In response to Research Question 3, participants were asked to review a list of factors and respond as to whether or not they hindered their preparation as healthcare educators. They were asked to rate the list of factors on a Likert scale of strongly agree (1), agree (2), neither agree nor disagree (3), disagree (4), or strongly disagree (5).

Based on the data, it was demonstrated that when preparing for their careers in healthcare education, slightly more than half, 127 (56%) of the respondents indicated that they were hindered in their preparation by their lack of training in instructional design. They also remarked that they were least hindered by lack of colleague support, lack of administrative support, and lack of or little self confidence. In combining the strongly agree and agree responses, these categories, recorded 40 (18%), 47 (20%), and 48 (21%), respectively. The remaining ten factors were relatively evenly distributed with regard to frequency and percentage. The factors and associated results can be found in Table 4.12.

Table 4.12
Factors Hindering Transition into Healthcare Education

			Neither				
Factor	Strongly		Agree nor		Strongly	Mean	Standard
i dotoi	Agree	Agree	Disagree	Disagree	Disagree	Wican	Deviation
·	n (%)	n (%)	n (%)	n (%)	n (%)		
lack of background in education theory/practice	19 (8)	81 (36)	39 (17)	62 (27)	26 (11)	2.98	1.20
lack of training in instructional design	30 (13)	97 (43)	34 (15)	48 (21)	17 (8)	2.67	1.17
lack of instructional delivery skills/experience	20 (9)	74 (33)	47 (21)	68 (30)	17 (8)	2.95	1.14
lack of classroom management skills/experience	28 (12)	82 (36)	37 (16)	61 (27)	17 (8)	2.80	1.19
lack of assessment skills/experience	21 (9)	77 (34)	38 (17)	65 (29)	24 (11)	2.98	1.20
lack of or little self confidence	10 (4)	38 (17)	32 (14)	89 (39)	57 (25)	3.63	1.16
lack of administrative support	19 (8)	28 (12)	48 (21)	93 (41)	38 (17)	3.46	1.16
lack of colleague support	14 (6)	26 (12)	45 (20)	90 (40)	51 (23)	3.61	1.14
struggling with institution's operational policies	19 (8)	55 (24)	45 (20)	70 (31)	36 (16)	3.22	1.22
overwhelming teaching/work load	27 (12)	61 (27)	49 (22)	64 (28)	24 (11)	2.99	1.21

Chi square tests were performed to further evaluate these data with regard to age, highest level of education, and years of experience in healthcare education.

Tables 4.13, 4.14, and 4.15 demonstrate the chi square data for age, highest level of education, years of experience respectively.

The chi square data presented in Table 4.13 demonstrated that there was no statistical relationship between age and the ten factors identified as possible hindrances in the preparation for a position in healthcare education.

Table 4.13
Chi Square Data Relating Age and Factors Hindering the Preparation for a Position in Healthcare Education

	bare Education	Degrees	
Factor	Chi Square	of	p-value
		Freedom	
lack of background in education theory/practice	10.896	12	.54
lack of training in instructional design	7.647	12	.81
lack of instructional delivery skills/experience	8.074	12	.78
lack of classroom management skills/experience	15.494	12	.22
lack of assessment skills/experience	16.298	12	.18
lack of or little self confidence	18.067	12	.11
lack of administrative support	17.146	12	.14
lack of colleague support	14.493	12	.27
struggling with institution's operational policies	14.308	12	.28
overwhelming teaching/work load	13.827	12	.31

The chi square data presented in Table 4.14 demonstrated that there was no statistical relationship between highest level of education and the ten factors identified as possible hindrances in the preparation for a position in healthcare education.

Table 4.14
Chi Square Data Relating Highest Level of Education and Factors Hindering the Preparation for a Position in Healthcare Education

Preparation for a Posit	ion in ricatino		· I
Factor	Chi Square	Degrees of Freedom	p-value
lack of background in education theory/practice	22.268	20	.33
lack of training in instructional design	18.613	20	.55
lack of instructional delivery skills/experience	23.599	20	.26
lack of classroom management skills/experience	17.307	20	.63
lack of assessment skills/experience	22.240	20	.33
lack of or little self confidence	23.073	20	.29
lack of administrative support	19.723	20	.48
lack of colleague support	20.485	20	.43
struggling with institution's operational policies	17.785	20	.60
overwhelming teaching/work load	22.613	20	.31

The chi square data presented in Table 4.15 demonstrated that there was no statistical relationship between years of experience in healthcare education and the ten factors identified as possible hindrances in the preparation for a position in healthcare education.

Table 4.15
Chi Square Data Relating Years of Experience in Higher Education and Factors
Hindering the Preparation for a Position in Healthcare Education

- I midding the Frequency		Degrees	
Factor	Chi Square	of	p-value
		Freedom	
lack of background in education theory/practice	12.375	20	.90
lack of training in instructional design	11.521	20	.93
lack of instructional delivery skills/experience	9.302	20	.98
lack of classroom management skills/experience	16.751	20	.67
lack of assessment skills/experience	8.842	20	.99
lack of or little self confidence	25.771	20	.17
lack of administrative support	21.467	20	.37
lack of colleague support	23.443	20	.27
struggling with institution's operational policies	25.018	20	.20
overwhelming teaching/work load	22.183	20	.33

As a follow-up, an open-ended question was included which asked the participants to identify any other factor or factors, not listed on the survey, which they felt hindered their transition into healthcare education. A total of 49 participant responses was recorded. From the responses, a total of 51 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) no additional factors were identified, 18 (35%), (b) lack of educational knowledge, 5 (10%), (c) lack of preparation time, 4 (8%), (d) lack of mentoring, 3 (6%), (e) lack of orientation, 3 (6%), and (f) work load, 3 (6%).

Eighteen of the respondents stated that they could not identify any other factors which hindered their transition into education. And, although respondents were asked to identify factors other than those listed on the survey, two of the most prominent emergent themes were repeated from the survey categories—lack of educational knowledge and lack of orientation. Based on the data in Table 4.12, 100 (44%) of the respondents strongly agreed or agreed that they lacked a background in educational theory/practice and 74 (32%) admitted struggling with institution's operational policies.

Those admitting to an insufficient theoretical foundation expressed concern with a "general lack of understanding of academia" and "how to make the classroom bridge to the clinical setting". Limited preparation time added anxiety. One respondent articulated, "You are basically hired, given your teaching load, given three days of orientation which was heavily focused on things that were not a priority at the time, followed by one day to learn how to use college specific software for posting assignments, lectures, etc., and get ready for class. It was the hardest, most stressful thing I have ever done." Another respondent summarized the preparation time as "only being able to be one step ahead of the students the first year of teaching."

Those who desired more mentoring suggested "professional mentoring" from "seasoned faculty". With regard to orientation, the respondents saw the sessions as either "heavily focused on things that were not a priority at the time" or lacking important topics such as "learning the culture of academia" and "how to prepare for an educational position."

Workload was noted by three individuals. All expressed similar concerns—
"one person running the program", having multiple job responsibilities, and
"administrative responsibilities."

A complete listing of factors hindering the transition into healthcare education can be found in Appendix R; the complete listing of emergent themes can be found in Appendix S.

As an additional follow-up, participants were asked to identify experiences and/or activities for which they were least prepared as new healthcare educators. A total of 192 participant responses was recorded. From the responses, a total of 245 themes were coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) assessment, 55 (22%), (b) instructional design, 29 (12%), (c) administrative processes, 21 (9%), (d) counseling/advising students, 21 (9%), (e) educational theory, 19 (8%), (f) instructional delivery, 19 (8%), (g) classroom/clinical management, 15 (6%), and (h) conflict management, 14 (6%).

A total of 55 respondents indicated that they were not prepared to engage in the "assessment of student learning" and the "evaluation of a student's clinical performance." In addition, there were a number of assessment activities the new healthcare educators would have liked to had exposure to at the time of their initial employment. These activities were identified by the respondents as follows:

- designing assessment tools
- writing test questions
- providing constructive criticism

- evaluating teaching effectiveness
- evaluating programs
- gathering and analyzing data

Instructional design was another area where healthcare educators felt illprepared. Again, a number to topics were identified. A few were described as follows:

- course design and preparation
- curriculum development and design
- lecture preparation
- use of online course delivery systems

Trying to 'navigate the bureaucratic broken processes of higher education" presented a problem for some respondents. Others identified general administrative processes like budgetary procedures, "implementing large scale community partnerships", and the 'legalities of student issues" which caused difficulty. Others commented on the administrative duties which were more programmatic in nature such as "decision making," "scheduling clinical rotations for students," and dealing with the "purchase of equipment and supplies."

Several healthcare educators expressed unfamiliarity with counseling and/or advising students. One respondent acknowledge being unprepared for "all the personal problems that students come into the setting with." Another added that many students have "emotional needs" and that it was difficult to "deal with students who have complex personal lives and financial problems." When focusing on student performance, one individual noted the difficulty associated with handling

student failures and student professionalism issues. One respondent remarked on being unprepared to "counsel students for poor clinical behaviors," while another explained it was difficult to learn to "nurture the least qualified to develop to their highest potential."

Educational theory was another area where healthcare educators indicated they were unprepared. Respondents felt the need for further development in the areas of:

- active learning
- developing assignments linked to course objectives
- learning strategies for adult learners
- motivation
- learning styles
- student engagement

Not only did the healthcare providers admit difficulty developing curriculum due to deficiencies in educational theory, they also confessed unease with instructional delivery. Several comments were made with regard to time relating to instructional lectures; they had difficulty developing and "conducting a three hour classroom lecture." One individual commented, "I came from a very high paced position. It was difficult to stretch out my lectures to fill the time allotted. I was used to getting my points across without wasting words." "Teaching large classroom lectures" brought on fears for other new healthcare educators as another admitted a lack of "self confidence in the classroom in front of students."

Classroom management was another area where healthcare educators indicated a lack of preparedness. One individual commented on the hurdle of trying to learn to "run a classroom and deal with underprepared students." Another mentioned the challenge of handling "unexpected questions from students." This also bled into the clinical setting as one individual stated it was often difficult to "manage the complexity of the clinical education experience."

Managing student conflict was also a concern of new healthcare educators.

Several individuals confessed to a lack of experience in dealing with "disgruntled students", "cheating and harassment", and "student personalities." Student discipline, in general, was an area that one respondent was not prepared to handle.

A complete listing of the experiences and/or activities healthcare educators were unprepared to perform can be found in Appendix T; the complete listing of emergent themes can be found in Appendix U.

Research Question 4.

In response to Research Question 4, participants were asked to indicate how influential a list of factors was in their decision to remain in education long term.

They were asked to respond to the factors using a Likert scale of strongly agree (1), agree (2), neither agree nor disagree (3), disagree (4), or strongly disagree (5).

Based on the data, it was documented that the two most influential factors associated with healthcare educators' decisions to remain in the field of academia were devotion to the profession and the desire to promote it and the satisfaction received through teaching. In combining the strongly agree and agree responses,

these categories recorded 210 (94%) and 213 (94%), respectively. Three of the remaining four factors were also considered favorable factors with regard to frequency and percentage. Salary, however, was not considered an influential factor. Less than half of those healthcare educators responding, 96 (42%), were influenced (strongly agreed or agreed) by salary. The factors and associated results can be found in Table 4.16.

Table 4.16
Factors Influencing Healthcare Educators to Remain in Education

			Neither				
Factor	Strongly Agree n (%)	Agree n (%)	Agree nor Disagree n (%)	Disagree n (%)	Strongly Disagree n (%)	Mean	Standard Deviation
the appeal of academic benefits (schedule/holidays)	111 (49)	86 (38)	14 (6)	9 (4)	6 (3)	1.73	.94
devotion to your profession and the desire to promote it	144 (64)	66 (29)	13 (6)	1 (0)	0 (0)	1.42	.62
satisfaction received through teaching	164 (72)	49 (22)	12 (5)	2 (1)	0 (0)	1.35	.62
academic freedom/independence	107 (47)	85 (37)	24 (11)	5 (2)	6 (3)	1.76	.92
desire for continued growth and development within the profession	132 (59)	65 (29)	25 (11)	0 (0)	3 (1)	1.56	.80
salary	38 (17)	58 (26)	52 (23)	39 (17)	39 (17)	2.92	1.35

Chi square tests were performed to further evaluate this data with regard to age, highest level of education, and years of experience in healthcare education. Tables 4.17, 4.18, and 4.19 demonstrate the chi square data for age, highest level of education, years of experience, respectively.

The chi square data presented in Table 4.17 demonstrated that there was no statistical relationship between age and the six factors identified as possible factors influencing the decisions of healthcare educators to remain in academia.

Table 4.17
Chi Square Data Relating Age and Factors Influencing Healthcare Educators to Remain in Education

Factor	Chi Square	Degrees of Freedom	p-value
the appeal of academic benefits (schedule/holidays)	20.742	12	.05
devotion to profession and the desire to promote it	5.369	12	.80
satisfaction received through teaching	7.565	12	.58
academic freedom/independence	10.450	12	.58
desire for continued growth and development within the profession	10.346	12	.32
salary	6.379	12	.90

The chi square data presented in Table 4.18 demonstrated that there was a statistical relationship between the highest level of education and one of the six factors identified as possible the decisions of healthcare educators to remain in academia—the appeal of academic benefits such as schedule and holidays.

Those with Master's degrees were most influenced by this factor. There was no

statistical relationship between highest level of education and the remaining five factors.

Table 4.18
Chi Square Data Relating Highest Level of Education and Factors Influencing
Healthcare Educators to Remain in Education

Healificate Educato	10 10 1101110111111	Degrees	
Factor	Chi Square	of Freedom	p-value
the appeal of academic benefits (schedule/holidays)	51.208	15	.00
devotion to profession and the desire to promote it	10.428	15	.79
satisfaction received through teaching	11.629	15	.71
academic freedom/independence	24.416	20	.23
desire for continued growth and development within the profession	10.735	15	.77
salary	23.134	20	.28

The chi square data presented in Table 4.19 demonstrated that there was no statistical relationship between the years of experience in healthcare education and six factors identified as possible the decisions of healthcare educators to remain in academia.

Table 4.19
Chi Square Data Relating Years of Experience in Healthcare Education and Factors Influencing Healthcare Educators to Remain in Education

Factor	Chi Square	Degrees of Freedom	p-value
the appeal of academic benefits (schedule/holidays)	23.650	15	.26
devotion to profession and the desire to promote it	11.153	15	.74
satisfaction received through teaching	13.764	15	.54
academic freedom/independence	18.184	20	.58
desire for continued growth and development within the profession	11.520	15	.72
salary	21.004	20	.40

As a follow-up, an open-ended question was included which asked the participants to identify any other factor, not listed on the survey, which would influence their decision to remain in healthcare education. A total of 83 participant responses was recorded. From the responses, a total of 94 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) satisfaction of teaching, 27 (29%), (b) college benefits, 16 (17%), (c) college atmosphere, 11 (12%), (d) no other factors were identified, 11 (12%), (e) lack of desire to return to the clinical setting, 8 (9%), and (f) job security, 6 (6%).

While a number of respondents could not identify any additional factors, the top two emergent themes were repeated from the survey's identified list of factors-satisfaction received through teaching and the appeal of academic

benefits. According to the data in Table 4.16, satisfaction received through teaching recorded a favorable response of strongly agree or agree by 213 (94%) of the respondents. One individual stated, "Working with students who are the center of my universe provides the greatest satisfaction." Another commented on the "satisfaction of seeing [your] students develop professionally and be successful once they have graduated." This was reciprocated by the students' recognition of the educators' hard work as confirmed by one comment, "I am constantly reassured that I should remain in education in the 'thank yous' I receive from graduates." One respondent elaborated, "The students keep me young-thinking! I love the dialog, the interactivity, the enjoyment in the classroom, the opportunity to establish boundaries of excellence in my face-to-face and virtual classrooms." Another summarized by saying, "I love teaching and watching students grow."

Table 4.16 documented that 197 (87%) of the respondents strongly agreed or agreed with the fact that the appeal of academic benefits influenced their decisions to remain in healthcare education. The benefits identified were retirement, health care, tenure, and tuition reimbursement.

With regard to college atmosphere, a number of the respondents commented on the enjoyment they received from working with their colleagues.

One individual noted the "flexibility of the schedule and independent work environment." Another noted the "professional respect in college environment."

"Lack of desire to return to clinical work" was the sentiment expressed by a number of healthcare educators. One individual stated "age and probability of not being able to 'run' for twelve hours [a day] in the hospital" was a deterrent for not wanting to return to clinical work. However, another stated, "I find the clinical environment boring now that I have been in education. I'm never going back!!"

While a number of the healthcare educators identified job security and job stability as a factor which influenced their decision to remain in academia, none of them elaborated on the topic.

A complete listing of other factors influencing healthcare educators to remain in education can be found in Appendix V; the complete listing of emergent themes can be found in Appendix W.

Research Question 5.

In response to Research Question 5, participants were asked to review a list of demonstrated behaviors and select five they believed led to the development of an effective healthcare educator. The top five demonstrated behaviors of effective healthcare educators were (a) appropriate level of knowledge/skill, (b) excellent communication skills, (c) sensitive/responsive to student needs, (d) professional behavior, and (e) motivated. Table 4.20 captures the demonstrated behaviors and the corresponding frequencies and percentages of the respondents.

Table 4.20
Demonstrated Behaviors of Effective Healthcare Educators

Demonstrated Behaviors		Frequency	Percentage
appropriate level of knowledge/skill		165	73
excellent communication skills		160	70
sensitive/responsive to student needs		146	64
professional		109	48
motivated		106	47
quality instructional methods		104	46
ethical		100	44
organized		89	39
adaptable		87	38
efficient classroom management skills		67	30
	total	227	

In conclusion, healthcare educators were asked to include any additional comments regarding their pre-teaching and/or their current teaching experiences. A total of 72 participant responses was recorded. From the responses, a total of 72 themes was coded and categorized. Based on the frequency of occurrence, the prominent emergent themes included: (a) helpful hints and suggestions for new educators, 26 (36%), (b) no additional comments, 13 (18%), (c) assertions on the love of teaching and students, 11 (15%) and (d) general commentary, 10 (14%).

While a number of the healthcare educators stated they had no further comments, many provided helpful hints and suggestions for those healthcare providers who were new to education or considering the transition into education.

One individual explained,

I believe that traditionally, those coming from the clinical setting into the academic arena are at a disadvantage due to their lack of background knowledge regarding teaching methodologies. It takes at least 3-4 years, before most new instructors become comfortable in their role. It also requires a great deal of motivation on the part of the new instructors to attend workshops and investigate teaching strategies that work best for them and their students.

Another individual commented on the importance of continuing with a "formal education." Another suggested that "those new instructors that have no educational background to co-teach classes initially rather than handle entire classes by themselves so that they can gain a better understanding of the way to handle students/situations."

Several stressed that it was "good to have clinical experience in the health profession prior to teaching [because it] adds to real-world experiences" to the academic setting. Another explained the importance of keeping "your clinical skills sharp" even after accepting a teaching position due to the fact that technology changes constantly.

One individual explained the importance of today's culture and how young people differ in their views. This healthcare educator was quoted,

Understanding the culture of the young adult is a very important concept.

Their world is very different from the working world I entered. Knowing how and why they see things as they do can help us to help them transition to more professional and caring healthcare practioners.[sic]

Another respondent commented on the unique culture of today's students and identified a means facilitating their transition into a healthcare care was by being "a good listener" and being a "very patient" educator.

A number of the healthcare educators expressed their love for teaching and the students. One individual explained, "It was easy to transition to teaching a career that you loved and enjoyed. Difficult to leave the patients and their needs. You have to transfer your devotion and enthusiasm from the patients onto the students." Another stated, "I loved what I did before I came here to teach and I love what I do now. The satisfaction I receive when my students do well and succeed totally negates the decrease in salary. We definitely don't do it for the money."

Several healthcare educators felt the need to include general commentary in conclusion. A number of the comments were not truly relevant to the study. However, two individuals provided great insight. One remarked,

In my third year of teaching, I gave very serious thought to leaving my field and selling shoes. I felt like a complete failure. Fortunately, my current job opened up. The first years here were tough, but my colleagues were more supportive. Now I'm about to retire yet I feel like I've just gotten a handle on this teaching thing!

Another summarized, "I'm not sure anyone can prepare you for the transition into teaching. I don't think anyone realizes the time and effort that goes into a quality experience for students."

A complete listing of the comments made by the healthcare educators can be found in Appendix X; the complete listing of emergent themes can be found in Appendix Y.

Summary

This chapter presented the data collected via the online survey developed for this study. Data were presented in terms of response rate, data collected, and data generated via statistical analysis to substantiate the established research questions. The foremost portion of the chapter addressed the study's response rate, demographic data, and the participants' responses to the survey. The chapter concluded with the reporting of statistical analysis completed on the collected data pertaining to the study's research questions.

CHAPTER 5

CONCLUSIONS

Introduction

This chapter will begin with a review of the research study by summarizing the first three chapters. The central portion of the chapter will focus on the findings of the study which will be accompanied by discussion related to the research questions and relevant literature. The chapter will conclude with implications for practice and recommendations for future research.

Summary of Previous Chapters

The Chapter 1 summary will review the statement of the problem and its purpose. The relevant literature and the themes which emerged will be presented in the summary of Chapter 2. The methodology employed will be presented in the review of Chapter 3.

Summary of Chapter 1.

As medical technologies have continued to advance, the healthcare community has continued to energetically recruit competent healthcare graduates from various healthcare programs who are capable of staying abreast of those technological advances. Unfortunately, the efforts to recruit and retain

healthcare educators have not been as straightforward or as successful. A shortage of healthcare educators has been documented and projected to worsen in the near future. In order to develop and retain healthcare educators, effective strategies must be identified which will facilitate the transition from healthcare provider to healthcare educator.

The purpose of this study was to identify effective methodologies to assist healthcare providers transitioning into educational leadership positions by identifying strategies relating to development and ultimately retention of those individuals. More specifically, the study attempted to identify effective strategies which promoted and supported the development of skills needed for success in the instructional setting. The study also evaluated perceptions of healthcare educators as to factors which encouraged an interest in transitioning into the academic arena and which factors encouraged a long-term commitment to an educational career. The study also evaluated perceptions of healthcare educators as to the factors which were most effective and most obstructive in transitioning from the healthcare environment to the educational setting. In conclusion, the study evaluated perceptions of healthcare educators as to demonstrated behaviors which they believed defined effective healthcare instruction.

Summary of Chapter 2.

The review of recent literature documented a shortage of healthcare educators and predicted the shortage to worsen in the near future. (Hilton, 2003;

Morris, 2006). Several causative factors associated with the shortage were identified. Among those emerged the themes of attrition, benefits of healthcare education, economic factors, and preparation standards.

Attrition was considered a contributing factor to the healthcare educator shortage in that many healthcare educators entered the academic setting with little formal training in educational theories and strategies (Schraw & Brooks, n.d.). These unprepared individuals simply chose to leave the academic setting due to lack of preparation and inability to succeed in the classroom. Brady (2007) explained that excessive workload and work hours also contributed to the stress of the new healthcare educators. Being unfamiliar with institutional traditions and the lack of support were also linked to healthcare educator burnout and a desire to leave academia (Starnes-Ott & Kremer, 2007). It was also documented, based on recent data projections, that an increasing number of educators were nearing the age of retirement (Falk, 2007; Gonzalez, Stewart & Robinson, 2003; Hilton, 2004; Morrison, 2006; Starnes-Ott & Kremer, 2007) and the difficulty in recruiting new healthcare educators.

One notable factor identified in the literature was the salary disparities between the healthcare and educational settings (Giordano, 2004; Hilton, 2003; MacKinnon & Leighton, 2002; Spivey, Chisholm, Murphy, Rice, & Morelli, 2009; Swafford & Legg, 2007; Trossman, 2002; United States Department of Health and Human Services, 2005). It was well documented that healthcare professionals, and even new graduates, could earn more per year in the

healthcare setting as compared to an academic position (Hilton, 2003; Morris, 2006)

Yet another factor contributing to the healthcare educator shortage was preparation standards. In addition to professional licenses, many healthcare programs require faculty to hold educational degrees beyond their initial training as required by the educational standards established by accrediting agencies. Therefore, as mentioned above, not only were new healthcare educators unprepared to perform in the classroom, many of them did not meet the accrediting agencies' guidelines (Giordano, 2004; Lyons, 2007; Swafford & Legg, 2007).

Resolution strategies related to the current healthcare educator shortage were revealed intermittently in the literature. Giordano (2004) asserted that no simple solutions existed to the healthcare educator shortage. A number of individuals proposed solutions that involved identifying potential future educators among allied health students, mentoring new healthcare faculty members, and pursuing ways to supplement healthcare faculty salaries (Falk, 2007; Giordano, 2004; Hessler & Ritchie, 2006; Hilton, 2003; MacKinnon & Leighton, 2002; Trossman, 2003). However, the predominant theme from the literature involved promoting the benefits of healthcare education to entice healthcare providers into transitioning into the academic setting. Factors associated with flexibility and the academic scheduling in relation to holidays were identified as benefits (Hilton, 2003; MacKinnon & Leighton, 2002; Trossman, 2003). Spivey et al. (2009) discussed other benefits such as opportunities for advancement and growth, job

security, potential for research, and building relationships with colleagues.

Trossman (2003) suggested promoting the faculty-student interaction as an additional benefit; supporting students through the learning process and enjoying their success should be considered a rewarding component of a healthcare educator's position.

In addressing preparation standards, the literature also discussed effective healthcare instruction. First and foremost, a demonstrated mastery of the knowledge base and clinical skills associated with the profession were defined as essential qualities of effective healthcare educators (Levy et al., 2009; Rodgers, Cross, Tanenbaum, & Tilson, 1997). Additionally, several researchers explained that a foundational base in educational strategies, including competency based education and adult learning theories, was also critical in the development of effective instruction (Baker College, 2010; "Increasing faculty retention," 2009; Schraw & Brooks, n.d.).

Rodgers et al. (1997) stated that in addition to knowledge, theory, and skills, healthcare educators must be creative, collaborative, and compassionate. Levy et al. (2009) elaborated by advocating the importance of being organized, professional, ethical, enthusiastic, and good communicators. Supervisory, conflict management, and counseling skills were also identified as important in the preparation of effective classroom management and thus instruction (Giordano 2004). Finally, Hilton (2003) suggested that healthcare educators be committed to life-long learning due to the fact that medical technologies advance as an exponential rate.

Summary of Chapter 3.

This study was descriptive in nature and utilized a mixed methods approach. The population for this study was comprised of healthcare educators employed in regionally accredited colleges and/or universities throughout the United States. The sample size included healthcare faculty from selected, accredited training programs sponsored by 98 colleges/universities which were located in 35 of the 50 states. The healthcare programs selected for this study included programs in dental (assistant and hygiene), emergency medicine-paramedic, health information management, nursing, pharmacy technology, radiologic technology imaging (to include, where applicable, diagnostic medical sonography, nuclear medicine technology, and/or radiation therapy), rehabilitation therapy assistant (occupational and/or physical), and respiratory care.

An online survey was developed by the researcher to collect both quantitative and qualitative data. The qualitative portion of the instrument was designed to gather demographic and other relevant data to substantiate the identified research questions. Additional open-ended questions were designed and included to gather qualitative data to enrich the quantitative data. The survey was reviewed by a panel of experts for content validity and pilot tested prior to data collection.

Once Institutional Review Board approval was received, an introductory email was sent to the healthcare dean/department head of each college/university chosen to participate. This email explained the research

project, requested the participation of the appropriate faculty, and provided instructions for completion of the online survey. Two weeks later, a reminder email was sent to prompt non-responders into participating.

Findings and Discussion

Since this study was designed using a mixed method approach, this section will report the findings based on that methodology accompanied by discussions. Demographic data will be presented in terms of its descriptive findings and the remaining data will be presented along with the inferential statistics in support of the associated research questions.

Demographics.

The demographic data were collected to provide an overall description of sample of healthcare providers selected to participate in this study. In reviewing the age distribution of the healthcare educators who participated in the study, it was noted that 185 (80%) were women and 46 (20%) were men and the majority (76%) of the participants were older than age 46. Current demographic data were not located for healthcare educators; however, in comparison to recent clinical workforce demographics, it was noted that the healthcare educators in this study represented a more veteran group than currently practicing physicians who documented only 49% of the same age category (United States Department of Health and Human Services, 2003). However, the participants of this study

appear to be representative of the group of individuals discussed in recent literature—those nearing retirement age.

While fifty-four percent of the healthcare educators acknowledged that they had completed theoretical courses prior to transitioning into academia, they gave no description as to what kind of theoretical training they had received. Additionally, fifty-seven percent of the healthcare educators indicated their highest level of education to be a master's degree. This was not surprising based on the fact that 92% indicated they were employed by a healthcare program that participated in specialty accreditation. The respective accrediting agencies would have, in place, guidelines for faculty credentialing; therefore dictating the highest level of education for faculty. According to literature, a master's degree would be required by accreditation standards to administer the program and/or teach within the curriculum.

An overwhelming majority (96%) reported that they were full-time educators, which was a goal of the research's design. Forty-one percent documented less than ten years of experience in healthcare education, while 29% documented 21 years or more.

Nursing programs had the greatest number of educators respond to the survey with 70 (31%) participating. This was not unexpected as nursing programs historically have larger student enrollments and larger numbers of faculty than other healthcare programs. The second largest responding program was radiologic technology with 45 (20%). Perhaps this was due to the fact that

this particular category also encompassed a number of programs such as nuclear medicine, radiation therapy, and sonography.

Discussion of Research Question 1.

Research question 1 asked the healthcare educators to identify factors which were most influential in their decisions to transition from healthcare providers to academia. To address this question, both quantitative and qualitative data were collected.

Respondents articulated that they transitioned into the clinical setting primarily based on their devotion to their profession and their desire to promote it (95%) and the satisfaction they received by teaching (94%). Salary (27%) was the factor that demonstrated the least amount of influence on the healthcare educators' decisions to transition into academia.

Being devoted to the profession was identified as a benefit of healthcare education and a tool for recruiting new healthcare educators. Respondents openly voiced pride in their profession. For some of the healthcare providers, transitioning into the academic arena was a means of promoting their profession by teaching others about the career they loved. For others, entering the academic arena was a means of giving back to their profession. Both instances led to the opportunity to educate and influence the future generations of healthcare providers. These results were consistent with the suggestions of MacKinnon and Leighton (2002) who explained that educators could ultimately

improve patient care by promoting their profession and providing quality instruction.

Ninety-four percent of the respondents in this study indicated that they transitioned into academia based on the satisfaction they received by teaching.

Again, these data supported other claims that healthcare providers who transition into educational leadership roles can be described as individuals with innate desires to help others succeed. The results of this study further substantiated claims by others that supporting students throughout their learning and enjoying student successes were identified as benefits of educational careers (Trossman, 2002).

Only 27% of the respondents indicated that salary played an influencing factor in their decision to transition into education. This was the factor with the least amount of influence. It was previously well-documented that salary disparities existed between healthcare education and the professional, clinical settings. Hilton (2003) noted that, in some instances, healthcare providers could earn significantly more per year in the clinical setting as compared to an academic position. Morris (2006) went on to explain that healthcare graduates often begin working new clinical careers at much higher salaries than their program instructors who many had years of experience and more advanced degrees. It was not difficult to understand how those with a true love for teaching would accept reduced salaries to transition into education in order to promote their professions and help students succeed. For many healthcare educators,

the rewards of watching their students succeed surpassed monetary compensation.

Further statistical significance was found between highest degree of education and the devotion to the profession and the desire to promote it.

Healthcare educators with higher educational levels were more strongly influenced by the devotion to their profession and the desire to promote it. This seems to indicate that those individuals with more advanced degrees demonstrated more commitment to the educational process and were more motivated to promote it. Additionally, these data supported the need for life-long learning as indicated by Hilton (2003).

An additional statistical relationship occurred between years of experience and salary. Those healthcare educators with less than 20 of years of experience were the ones who disagreed or strongly disagreed with salary being an influential factor in their decision to transition into academia. The more seasoned educators were apparently well-adjusted to their situation and may be more comfortable with the other benefits offered by their positions. It was possible that these older individuals were more willing to accept their current salaries based on the knowledge that they would soon be retiring.

The healthcare educators were asked to identify and comment on any other factor, not listed on the survey, which influenced their decision to transition from the clinical setting into the academic setting. Two of the emergent themes paralleled the quantitative data—love of teaching and the desire to promote the profession. It was evident from both data sets that these two elements, desire to

promote the profession and love of teaching, were primary motivational factors in healthcare providers' decisions to pursue careers in education.

Another popular reason healthcare educators identified for transitioning into the academic setting was their diminishing desires and physical inabilities to function in the clinical setting. This was not surprising for two reasons. First, the work of a healthcare provider can be physically demanding and the hours can be long and relentless. As one individual stated, "Working in the hospital with 12 hour shifts is not always the best position." The demanding schedule of the clinical setting was just no longer appealing for some due to family responsibilities and or physical limitations. Second, the majority of the healthcare educators responding to the survey was over age 46 and it was reasonable to suggest that those individuals may have no longer been physically able to compete in the clinical setting, especially with the younger workers. One individual explained, "As I'm aging, I find it more difficult to meet the physical demands."

Be it a scheduling issue or the physical demands of the clinical setting, there were a number of respondents who were not willing to return to the patient care setting after having been a full time educator. Others were quick to explain that the roles and responsibilities of an educational leader were endless and in some ways just as taxing and tiring.

Discussion of Research Question 2.

Research question 2 asked healthcare educators to identify factors they found to be the most conducive for preparation in a career in healthcare education. To address this question, both quantitative and qualitative data were collected.

Healthcare educators articulated that they believed their previous clinical work experiences were the most conducive factor in preparing them for their position in healthcare education. They also noted that modeling instructor behaviors from previous academic experiences, previous theoretical educational training, and assistance from colleagues, supervisors, and/or dean were also helpful.

Ninety-four percent of the respondents agreed or strongly agreed that their previous clinical experiences assisted in their transition to academia. Healthcare educators indicated that their experience in the clinical setting solidified their foundational knowledge with regard to clinical and patient care skills. Starnes-Ott and Kremer (2007) had noted that not every good clinician transitioned into an effective educator. They explained that the academic setting required an additional knowledge base and a new set of skills, behaviors, and attitudes. However, the results of this study demonstrated that healthcare educators relied a great deal on their previous clinical experiences when connecting their knowledge and skill to theory and then conveying it to students.

Modeling instructor behaviors from previous academic experiences was also selected as a factor which healthcare educators found helpful as they

prepared for their new careers. For some, recalling how past instructors managed the classroom and delivered lectures was a memorable and pleasant experience. In these instances, the new healthcare educators were able to base their classroom behaviors on those they had experienced. However, one individual expressed the need to move away from past experiences. This individual described previous educational experiences which were filled with threats and intimidation and recalled the difficulty it created in the learning environment. Clearly, past learning experiences and instructors demonstrated to the respondents how or how not to conduct themselves in the educational environment. However, Misch (2002) explained that most healthcare educators had minimal formal training in educational theory; therefore, they knew little about teaching and learning processes. Based on the results of this study, it was possible that new healthcare educators were modeling their behaviors on previous instructors who were not properly trained in adult learning theories and competency-based education.

Seventy-eight percent of the respondents agreed or strongly agreed that their previous theoretical educational training assisted in their transition to academia. It was unclear what kind of theoretical training these individuals had. However, based on the comments throughout the survey, a knowledge base in theoretical education was a re-occurring topic of interest. These results were not unforeseen as most healthcare educators were once healthcare providers who functioned daily in competency based environments, yet had limited, formal, teaching experience. However, after transitioning into academia most became

acutely aware of their inadequate knowledge of or lack of theoretical training with regard to educational theory (Schraw & Brooks, n.d.). Levy, et al. (2009) further explained the importance of healthcare educators being able to understand adult learning theories and being able to incorporate competency-based learning with experiential learning in order to allow students the opportunity to more completely "engage in the learning process" (p. 10).

More than half (61%) of the respondents claimed that assistance from colleagues, supervisors, and/or dean eased their transition into academia. This, too, was a recurring topic. New healthcare educators were eager to give credit to their colleagues for supporting them during their transition into education. Many times this support came via mentoring and team teaching. Other times, it came from administrative personnel who occasionally offered advice. Through this transitional period, working with their colleagues in such a manner, the new healthcare faculty was able to build strong, long-lasting relationships. This made a real impact with many of the new educators as they attributed their likelihood of remaining in education to their relationships with their colleagues. This result was consistent with findings of Spivey et al. (2009) who also identified relationships with colleagues as being a significant intrinsic factor in the decision of healthcare educators to remain in academia long-term.

The importance of previous clinical work experiences, assistance from colleagues, and theoretical training was substantiated when the healthcare educators were asked to identify and comment on any other factor, not listed on the survey, which they found conducive in their preparation for their position as a

healthcare educator. Again, clinical experience emerged as a prominent theme. Others were quick to note the importance of supportive colleagues citing such things as "interactivity with colleagues", "informal discussions of teaching [with colleagues]", and "contacting colleagues at other institutions." Finally, a number of healthcare educators expressed the importance and value of pursuing or having an advanced degree.

Additionally, the educators described opportunities that were made available to them at the time of their initial employment. The responses ranged from mentoring to general orientation sessions to various college in-services. Most of the comments on mentoring were positive; however, very little detail was given on the mentoring activities. Some suggested that the mentoring was conducted in a very informal manner, while others described mentoring that was apparently well structured. The same can be said for the orientation sessions. Some orientation sessions were described as generalized sessions and of little or no value, while others were very organized and meaningful. The comments on in-service activities provided more insight. Some of the healthcare educators received significant and useful information in these sessions. Others did not. A number of the respondents remarked that topics on educational methodologies were the most practical and helpful.

Based on this information, it seemed that the healthcare educators wanted more structured, formal mentoring programs with seasoned faculty members who were interested in supporting new faculty. They implied that orientation sessions for new faculty should also be well-structured and contain pertinent information

regarding the institution's operational policies. In addition, introductory information should be included for those new to the academic setting. Basic educational theory should be presented to help prepare new educators for the pursuit of leading students toward success. The topics for college in-service sessions for new faculty should further guide them through the transitional process by providing them the educational knowledge base they need to progress and grow in their new positions as educators.

The importance of mentoring, orientation, and theoretical training was further substantiated when the healthcare educators were asked to identify and comment on the training opportunities they believed would have provided the greatest benefit as they transitioned into their new role as a healthcare educator. Again, mentoring emerged as the most prominent theme, followed by educational courses and orientation sessions. Here, the educators specifically requested "strong peer mentoring" by "experienced educators in the field" which, again, suggested a more formalized, structured mentoring program. One individual even proposed offering the mentoring activities to the clinical instructors. This presented a potential extension of the traditional mentoring opportunity from the didactic setting into the clinical setting. This substantiated Starnes-Ott and Kremer's (2007) explanation that mentoring programs provided faculty with a better understanding of organizational culture and academic processes, thus, promoting faculty self confidence and success.

The educators' comments on orientation sessions were limited and general in nature. A few individuals suggested better orientation but offered no

suggestions for improvement. However, they expressed great opinions on the need for educational courses which were theoretical in nature. They offered suggested topics such as adult learning theories, competency based education, curriculum development, and assessment. Additionally, they indicated the need to gain knowledge of classroom management skills, conflict management, lecturing techniques, abnormal psychology, and educational research.

Again, these results were consistent with the literature. It was noted that one means of retaining healthcare faculty was to provide training opportunities for new hires including information on adult learners, competency based education and basic, educational theory ("Increasing faculty retention," 2009). Coupled with appropriate orientation to the college and the role of teaching via mentoring, such training would offer the best opportunity for a new healthcare educator to succeed.

Discussion of Research Question 3.

Research question 3 asked healthcare educators to identify the factors they found to be the least conducive for preparation in a career in healthcare education.

To address this question, both quantitative and qualitative data were collected.

Slightly more than half, 127 (56%), of the healthcare educators indicated that they were hindered in their preparation by their lack of training in instructional design and an additional 100 (44%) expressed concern over their lack of background in educational theory and/or practice. As previously

explained, this was not surprising as most healthcare educators came from patient care environments with little or no formal teaching experience. However, after assuming an academic position, they became aware of their insufficient training in educational theory (Levy, et al., 2009). Misch (2002) had made the assumption that healthcare providers were capable of identifying their own personal and professional deficiencies and they possessed the motivation to address and amend them. Based on the results of this study, it might be hypothesized that healthcare educators were also capable of making those same self-assessments. Having dedicated their lives to career requiring attention to detail and competence, it was possible that these new healthcare educators were now seeking the knowledge they now needed to be successful and competent in their new positions.

This was substantiated when the healthcare educators were asked to comment on any other factors they believed hindered their preparation as new healthcare educators. Again, the emergent themes were consistent. The healthcare educators felt their lack of educational theory placed them at a disadvantage. A number of them also commented on two other recurring themes—the lack of mentoring and poor orientation. However, two new concerns surfaced. Faculty expressed anxiety over insufficient preparation time and excessive work load. Individuals commented that their programs' curriculum were so 'time intensive' that there was little time for anything other than preparing for classes. This was obviously a predicament for programs which employed only one or two faculty members. In those instances, faculty were not only

expected to carry full teaching course loads, they were also expected to hold administrative positions within the program and fulfill accreditation obligations. This lack of preparation time led to the excessive workload concerns that some expressed.

The study identified unmanageable academic workloads as one reason that healthcare educators left their academic positions, which corresponded with recent literature. Brady (2007) described how new healthcare educators became overwhelmed by academic assignments. For some, being the sole faculty member in a program meant being responsible for full teaching loads, the program's administration, and the supervision of students in the clinical setting. In addition to these responsibilities, healthcare educators often found themselves working after hours on curriculum development, grading, and administrative assignments. Having transitioned from the clinical setting, these educators remembered walking away from patient care responsibilities when their shifts ended. In the education setting, they realized their teaching jobs never ended. They were constantly planning lessons, creating assessments, reviewing students' work, supervising student learning activities, and completing administrative tasks.

Discussion of Research Question 4.

Research question 4 asked healthcare educators to identify the factors they found to be most influential in their decision to remain in education long-

term. To address this question, both quantitative and qualitative data were collected.

An overwhelming majority healthcare educators indicated that they remained in healthcare education for the love of teaching, 213 (94%), and to promote their professions, 210 (94%). Additionally, a statistical relationship between the highest level of education and the appeal of academic benefits such as schedule and holidays was identified.

It was not surprising to learn that healthcare educators wanted to remain in academia based on their love of teaching and to promote their professions. After all, these were originally the very reasons that most of them transitioned into education. It was, however, interesting to discover the statistical relationship between educational level and the appeal of academic benefits, such as scheduling and holidays. Those educators holding master's degrees were most influenced by the appeal of benefits offered by academia. Although an exact connection was not specified in the study, it might be hypothesized that those healthcare educators who held master's degrees were more settled in their careers and therefore, eager to accept and enjoy the scheduling and holidays offered by their academic careers. Those individuals with more advanced degrees possibly held administrative positions and less likely to take advantage of scheduling and holidays due to added responsibilities.

The themes relating to the love of teaching and academic benefits were substantiated when the participants were asked to comment on any other factors which would influence their decision to remain in healthcare education. Again,

the prominent themes which emerged were the love of teaching and benefits of working in an accredited institution of higher education. However, a number of new factors were uncovered. College atmosphere, lack of desire to return to the clinical setting and job security were identified as notable factors for many to remain in the academic setting.

When academic atmosphere was identified as a key factor for keeping healthcare educators in the higher education setting, it was the interaction with their colleagues that they valued. It was discussed earlier that when transitioning into the educational setting, new faculty members credited their initial success to the support they received from their colleagues. During that time, not only were working relationships developed—friendships were built. These connections actually played a role in faculty retention.

Others indicated that they had no desire to return to the clinical setting.

For a number of individuals, this was an age-related issue. The older educators expressed concerns with physical limitations. They explained that they were no longer capable of performing in the clinical setting. The long hours, taxing patient care, and precise clinical work was physically too demanding. However, for one educator, it had nothing to do with physical limitations. This individual stated, "I find the clinical environment boring now that I have been in education. I'm never going back!!"

Those who noted job security and job stability as a factor which influenced their decision to remain in academia failed to elaborate on the topic. However, in today's economic climate, hospitals and medical facilities have been forced to cut

budgets which have resulted in the reduction and/or elimination of healthcare positions. Therefore, it is likely that the healthcare educators viewed their academic positions, especially those who were tenured, as more stable and secure than their previous positions in the clinical setting.

These themes were congruent with the literature which suggested using intangible benefits like the love for teaching and desire to promote the profession as tools to recruit and retain new healthcare educators (MacKinnon & Leighton, 2002; Trossman, 2002). They were consistent with Hilton (2003) who had also explained that the benefits associated with careers in education, like flexibility and schedules, were also attractive. It was evident that many who transitioned into the academic setting did so based on their love of teaching. And, once they entered the academic setting, learned their role, and became comfortable with their position, they did not want to leave.

Discussion of Research Question 5.

Research question 5 asked the respondents to identify demonstrated behaviors which lead to the development of an effective healthcare educator. To address this question, quantitative data were collected.

The top five demonstrated behaviors of effective healthcare educators were (a) appropriate level of knowledge/skill, (b) excellent communication skills, (c) sensitive/responsive to student needs, (d) professionalism, and (e) motivation.

Once again, these data added to the existing body of literature which addressed essential skills of effective healthcare educators. Rodgers et al.

(1997) had identified mastery of the knowledge base and clinical skills associated with the profession to be an essential quality of healthcare educators. These individuals were more readily able to correlate their knowledge and/or skills to theory and then transfer the knowledge and/or skills to students in the didactic and clinical settings. Levy et al (2009) claimed that in order to do this effectively, excellent communication skills were as essential. This communication skill set would also be beneficial in daily interaction with colleagues and students.

The participants in this study recognized being sensitive and responsive to the needs of students as behaviors which led to effective healthcare education. These results were consistent with the findings of Hilton (2003) who mentioned the importance of faculty being good listeners and Rodgers et al. (1997) who discussed the importance of being compassionate. It was noted that today's generation of students bring to the learning environment a whole host of issues. Faculty who recognized students in crisis, academic or otherwise, and intervened properly were more likely to build relationships with the students which, in turn, could increase student success rates. In addition to counseling, Giordano (2004) also pointed out the importance of healthcare educators being proficient in the supervision of students and conflict management.

The respondents of the study identified the importance of professionalism in the development of effective healthcare instruction. Healthcare educators, in many instances, were mentors and role models for the students enrolled in their programs. The students looked to them not only for knowledge and skills, but for guidance on how to conduct themselves as future healthcare providers. These

finding were consistent with the discussions presented by Levy et al. (2009) who promoted the importance of healthcare educators being professional in their behavior.

Respondents also identified motivation as a behavior necessary in the development of an effective healthcare educator. Motivation was selected as a trait for several reasons. First, the workload associated with healthcare education was previously defined as intense and sometimes overwhelming. Second, due to the fact that medical technologies advance at an exponential rate, it was noted that healthcare educators be committed to life-long learning (Hilton, 2003). Last, healthcare educators must be inspired not only to motivate themselves, but to motivate students toward success.

Implications for the Profession

Communication of the findings of this research could have far-reaching implications for the profession and field of healthcare, in general. With the current shortage of healthcare educators predicted to increase in the near future, qualified healthcare providers who are willing to transition into educational leadership roles must be identified. Based on this study and its sample, the majority of healthcare providers transitioned into healthcare based on their love of their profession and the desire to promote it via teaching. The study also identified that healthcare educators new to academia required and deserved adequate orientation, structured mentoring, and exposure to educational theories. Finally, the participants identified that clinical knowledge and skills,

excellent communication skills, sensitivity to student needs, professionalism, and personal motivation to achieve were critical to the success of healthcare educators.

When recruiting new healthcare educators, colleges and universities should focus their efforts on locating and selecting individuals who profess a love for their profession and demonstrate a desire to promote it via teaching. Based on the findings of this study, these were the individuals who were most likely to transition into the academic setting and to remain long term. Additionally, these individuals also demonstrated a commitment to the educational process and were dedicated to pursuing the proper avenues in order to succeed and ensure student success.

Additionally, when recruiting new faculty, institutions should be cognizant of the behaviors and characteristics of effective healthcare educators. These behaviors/characteristics included (a) appropriate level of knowledge/skill, (b) excellent communication skills, (c) sensitive/responsive to student needs, (d) professionalism, and (e) motivation. Applicants should be evaluated for these traits during the screening and interview processes.

It was also determined that during the transitional process that new healthcare faculty required and deserved proper orientation. The orientation sessions developed and administered by the institution should be well-structured and composed of information pertinent to the new position. The institution's operational policies, faculty roles and responsibilities, and an introduction to educational theory were a few of the suggested topics to include. It was revealed

in this study that those healthcare educators who were well-prepared and well supported were the ones who committed to academia long-term.

Peer mentoring was also noted as an important tool for preparing new healthcare faculty. Mentoring proved valuable to new faculty if the seasoned faculty member had time and was interested in helping the new faculty develop and grow. A formal, structured mentoring program, where proper training was provided to mentors and scheduled activities were conducted, could be more beneficial. New faculty who received orderly, supportive direction could be better prepared to meet the challenges in the learning environment and therefore, more likely to remain in the position long term.

Throughout this study, healthcare educators explained that they lacked a foundational knowledge of educational theory when they began their careers in academia. This made their challenging new roles even more difficult. Institutions would be well advised to offer in-service programs for all faculty, especially newly hired faculty, which focused on fundamental educational theory. Instructional design and delivery, effective teaching strategies, learning styles, and student assessment were a few of the topics identified as critical. Additionally, the integration of adult learning theories and competency-based education should also be presented to new healthcare educators.

When addressing the causative factors associated with educator shortage these strategies could be applied in hopes of finding a resolution. Table 5.1 summarizes these strategies in relation to the causative factor. Additionally, the

strategies and causative factors are shown in relation to the research questions that provided the guidance for this study.

Table 5.1
Relationship between Research Questions, Causative Factors and Identified Strategies

Research Question	Causative Factor(s)	Identified Strategy(ies)
RQ1: What factors do healthcare educators identify as being most influential in their decision to transition from healthcare provider to healthcare educator?	Benefits of healthcare education	Recruit individuals who profess a love for their profession and who demonstrate a desire to promote it via teaching. Evaluate applicants based on behaviors and characteristics of effective instruction.
RQ2: What factors do healthcare educators identify as being the most conducive for preparation in a career in healthcare education?	Preparation standards	Provide well-structured, informative orientation sessions initially and, regularly scheduled, formal mentoring opportunities
RQ3: What factors do healthcare educators identify as being the least conducive for preparation in a career in healthcare education?	Economics and attrition	Provide in-service activities which focus on educational theory and practice.
RQ4: What factors do healthcare educators identify as being most influential in their decision to remain in education long-term?	Attrition and benefits of healthcare education	Recruit and develop individuals who profess a love for their profession and demonstrate a desire to promote it via teaching
RQ5: What demonstrated behaviors cause one to be an effective healthcare educator?	Preparation standards	Encourage ongoing development of behaviors and skills relating to (a) professional/clinical knowledge, (b) communication, (c) student interaction, (d) professionalism, (e) motivation of self and others.

If new healthcare educators transition into the academic setting and were to be given the support, via orientation, mentoring, and educational theory, that they need, they would be far better prepared to perform than those currently entering the field or those who preceded them. Those well-prepared educators could experience classroom and clinical success much quicker and could exhibit a greater deal of satisfaction; therefore, might be more likely to remain in their positions long-term. Consequently, should a healthcare educator transfer or retire, with such structured, new faculty orientation and mentoring programs in place and with high scores on faculty satisfaction surveys, it would be easier to recruit new faculty into the teaching environment.

Additionally, if better efforts were made, initially, to prepare new healthcare educators via orientation, mentoring opportunities, and educational theory, they could be better prepared for their new academic careers. They could then be in positions to provide more effective education, and, thus produce stronger, more competent healthcare graduates. These graduates, in turn, could provide a higher quality of care to patients in the clinical setting.

Further Research

As a result of this study, the following recommendations are made for future research:

 Conduct the study with a larger sample size. This might provide more demographic diversity in the responses.

- Conduct personal interviews with selected participants in order to enrich
 the qualitative data. The online survey somewhat limited the qualitative
 data and interviews would allow for probing questions and deeper
 analysis of data.
- Investigate the orientation programs currently offered to new healthcare educators at the various institutions to determine scope and composition of the content and timeframe of delivery.
- Investigate the mentoring programs currently provided to new healthcare educators at the various institutions determine scope and composition of the content and timeframe of delivery

Conclusions

Based on the data collected in this study, it was the love of teaching and desire to promote their profession that influenced the majority of healthcare educators to transition from the clinical setting into the academia. And, it was those same two factors that influenced their decisions to remain in education long-term. As new healthcare educators, it was their previous clinical work experiences that helped prepare them for their teaching positions; and, the lack of background in educational theory and practice which hindered their immediate, new career development. Improved orientation sessions, structured mentoring programs, and a better understanding of educational theory were at the forefront of what was needed to prepare clinicians to become instructors. Professional expertise, communication

skills, sensitivity to student needs, professionalism, and motivation were required for effective instruction.

The results of this study contributed to the existing body of literature regarding the recruitment, preparation, and retention of healthcare educators. The data addressed specific recruitment priorities and strategies which supported the importance of screening for dispositions necessary for effective instruction.

Preparation standards which emerged called for enhanced orientation, mentoring, and educational theory. The implications of this research have the potential to advance patient care through improved healthcare education.

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APPENDIX A INSTITUTIONAL REVIEW BOARD APPROVAL

MEMORANDUM

TO: Lisa Legg IRB # 11-030

Dr. Vicki Petzko

FROM: Lindsay Pardue, Director of Research Integrity

Dr. Bart Weathington, IRB Committee Chair

DATE: February 16, 2011

SUBJECT: IRB # 11- 030: Identifying Effective Indicators to Assist Healthcare Providers

Transitioning in Educational Leadership Roles

The Institutional Review Board has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 11-030.

Please remember that you must complete a Certification for Changes, Annual Review, or Project Termination/Completion Form when the project is completed or provide an annual report if the project takes over one year to complete. The IRB Committee will make every effort to remind you prior to your anniversary date; however, it is your responsibility to ensure that this additional step is satisfied.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu

Best wishes for a successful research project.

APPENDIX B POPULATION DATABASE

New England Association of Schools and Colleges

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Capital Community College	Hartford	CT		Х		Х		Р	R	
Gateway Community College	New Haven	CT				Χ			RNT	
Goodwin College	East Hartford	CT				Х				Х
Housatonic Community College	Bridgeport	CT						O P		
Lincoln College of New England	Southington	CT	ΑН					0	N	
Manchester Community College	Machester	CT						O P		Χ
Middlesex Community College	Middletown	CT							R	
Naugatuck Valley Community College	Waterbury	CT				Χ		Р	R	Χ
Norwalk Community College	Norwalk	CT				Х				X
Quinnipiac University	Hamden	CT				Х			R	
St. Vincent's College	Bridgeport	CT				Χ				
Three Rivers Community College	Norwich	CT				Χ				
Tunix Community College	Farmington	CT	ΑН					Р		
University of Bridgeport	Bridgeport	CT	Н							
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Central Maine Community College	Auburn	ME				Χ				
Central Maine Med Cntr Col of N and HP	Lewiston	ME				Χ			RN	
Eastern Maine Community College	Bangor	ME				X			R	
Kennebec Valley Community College	Fairfield	ME			Χ	Χ		O P	RS	Χ
Northern Maine Community College	Presque Isle	ME				X				
Southern Maine Community College	South Portland	ME				Χ			R T	Χ
University of Maine at Augusta	Augusta	ME	ΑН			Χ				
University of New England	Biddeford	ME	Н			Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Anna Maria College	Paxton	MA				Χ				
Atlantic Union College	South Lancaster	MA				X				
Bay State College	Boston	MA						Р		
Becker College	Worcester	MA				Χ				
Berkshire Community College	Pittsfield	MA				Χ		Р		Χ
Bristol Community College	Fall River	MA	Н		Χ	Χ		0		
Bunker Hill Community College	Boston	MA				Χ			R S	Χ
Cape Cod Community College	West Barnstable	MA	Н			Χ				
Endicott College	Beverly	MA				X				
Framingham State University	Framingham	MA				Χ				
Greenfield Community College	Greenfield	MA				Х				
Holyoke Community College	Holyoke	MA				Χ			R	
Labouré College	Boston	MA	•		Х	Х			Т	

A = Assisting (Dental) H = Hygiene (Dental)

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

R = Respiratory

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Massachusetts Bay Community College	Wellesley Hills	MA				Х		Р	R	
Massachusetts Col of Pharm & Hlth Sci	Boston	MA	Н						RNT	
Massasoit Community College	Brockton	MA	Α			Χ			R	Χ
MGH Institute of Health Professions	Boston	MA							R	
Middlesex Community College	Bedford	MA	АН			Χ			RS	
Mount Ida College	Newton Centre	MA	Н							
Mount Wachusett Community College	Gardner	MA	Н			Χ		Р		
North Shore Community College	Danvers	MA				Χ		O P	R	Χ
Northern Essex Community College	Haverhill	MA	Α			Χ			R	Χ
Quincy College	Quincy	MA				Χ				
Quinsigamond Community College	Worcester	MA	АН			Χ		0	R	Χ
Regis College	Weston	MA				Х			R	
Roxbury Community College	Roxbury Crossing	MA				Χ			R	
Salem State College	Salem	MA				Χ			N	
Springfield Technical Community College	Springfield	MA	АН			Х		O P	RNS	Χ
Suffolk University	Boston	MA							Т	
University of Massachusetts Dartmouth	North Dartmouth	MA				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Franklin Pierce University	Portsmouth	NH				Χ				
Great Bay Community College	Portsmouth	NH				Χ				
Hesser College	Manchester	NH						Р		
Manchester Community College	Manchester	NH				Χ				
Nashua Community College	Nashua	NH				Χ				
NHTI - Concord's Community College	Concord	NH	АН	Х		Χ			RT	
River Valley Community College	Claremont	NH				Χ		O P		Χ
Rivier College	Nashua	NH				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Community College of Rhode Island	Warwick	RI	ΑН			Χ		O P	RS	Χ
New England Institute of Technology	Warwick	RI						O P		
Salve Regina University	Newport	RI				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Castleton State College	Castleton	VT				Χ				
Champlain College	Burlington	VT							R	
Norwich University	Northfield	VT				Χ				
Southern Vermont College	Bennington	VT				Χ			R	
University of Vermont	Burlington	VT							N	
Vermont Technical College	Randolph Center	VT	Н			Χ				Χ
A = Assisting (Dental)		T - Padiogram		C _ C	Sonograph	/ /Diagna	otio Madia	۵۱/	_ D [Pecniratory

A = Assisting (Dental) H = Hygiene (Dental)

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

⁽Diagnostic Medical) R = Respiratory

¹²³

Middle States Association of Colleges and Schools

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Delaware State University	Dover	DE				Χ				
Delaware Technical & CC	Wilmington	DE	Н					O P	RNS	Χ
Delaware Technical & CC Jack F Owens	Georgetown	DE				Χ		O P	R	Χ
Delaware Technical & CC Stanton Camp	Newark	DE				Χ				
Delaware Technical & CC Terry Campus	Dover	DE		Χ		Χ				
University of Delaware	Newark	DE				Χ				
Wesley College	Dover	DE				Χ				
School	City	State	D	EMP	HIM	N	P	Т	RT	R
Allegany College of Maryland	Cumberland	MD	Н			Χ		O P	R	Χ
Anne Arundel Community College	Arnold	MD		Χ		Χ	Х	Р	R	
Baltimore City Community College	Baltimore	MD	Н		Χ	Χ		Р		Х
Bowie State University	Bowie	MD				Χ				
Carroll Community College	Westminster	MD						Р		
Cecil College	North East	MD				Χ				
Chesapeake College	Wye Mills	MD				Χ		Р	R	
College Of Notre Dame Of Maryland	Baltimore	MD				Χ				
College of Southern Maryland	La Plata	MD				Χ		Р		
Community College of Baltimore County	Baltimore	MD	Н	Χ	Χ	Χ		0	RT	Χ
Coppin State University	Baltimore	MD				Χ				
Fortis College Landover	Landover	MD	Н							
Frederick Community College	Frederick	MD				Χ				Χ
Hagerstown Community College	Hagerstown	MD							R	
Harford Community College	Bel Air	MD				Χ				
Howard Community College	Columbia	MD		X		X				
Johns Hopkins University	Baltimore	MD				X				
Montgomery College	Takoma Park	MD			Χ	Χ		Р	RS	
Prince George's Community College	Largo	MD			X	X			RN	Χ
Salisbury University	Salisbury	MD								Χ
Stevenson University	Stevenson	MD				Χ				
University of Maryland Baltimore	Baltimore	MD	Н	X		X			S	
Washington Adventist University	Takoma Park	MD				Χ				Χ
Wor Wic Community College	Salisbury	MD							R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Atlantic Cape Community College	Mays Landing	NJ				Χ				
Bergen Community College	Paramus	NJ	Н			Χ			RST	Χ
Brookdale Community College	Lincroft	NJ NJ				X			R	Χ

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R = Respiratory

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Burlington County College	Pemberton	NJ	Н		Х	Х			R	
Camden County College	Blackwood	NJ	АН		Х					
College of Saint Elizabeth	Morristown	NJ				Х				
County College of Morris	Randolph	NJ				Х			R	
Cumberland County College	Vineland	NJ	Α			Х			R	
Essex County College	Newark	NJ				Х		Р	R	
Gloucester County College	Sewell	NJ				Х			NS	
Kean University	Union	NJ				Х				
Mercer County Community College	Trenton	NJ				Х		Р	R	
Middlesex County College	Edison	NJ	Н			Х			R	
New Jersey City University	Jersey City	NJ				Х				
Ocean County College	Toms River	NJ				Х				
Passaic County Community College	Passaic	NJ				Х			R	
Ramapo College of New Jersey	Mahwah	NJ				Х				
Raritan Valley Community College	Somerville	NJ				Х				
Salem Community College	Carney's Point	NJ				Х				
Thomas Edison State College	Trenton	NJ				Х				
Union County College	Plainfield	NJ						Р		
University of Medicine & Dentistry of NJ	Newark	NJ	АН			Х			NS	Х
Warren County Community College	Washington	NJ				Х				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Adirondack Community College	Queensbury	NY				Х				
Borough of Manhattan CC CUNY	New York	NY		Х	Χ	Х				Х
Bronx Community College CUNY	Bronx	NY				Х			RN	
Broome Community College	Binghampton	NY	Н		Χ	Χ		Р	R	
Cayuga County Community College	Auburn	NY				Χ				
Clinton Community College	Plattsburgh	NY				Χ				
College of Staton Island CUNY	Staten Island	NY				Χ				
Columbia Greene Community College	Hudson	NY				Χ				
Corning Community College	Corning	NY				Х				
Daemen College	Amherst	NY				Х				
Dutchess Community College	Poughkeepsie	NY		Х		Χ				
Elmira College	Elmira	NY				Х				
Ellis Hospital	Schenectady	NY				Х				
Erie Community College SUNY	Williamsville	NY	Н		Χ	Χ		0	Т	Х
Excelsior College	Albany	NY DT Padiagram				Χ	atia Madia			

O = Occupational (Therapy)
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sical (Therapy) N = Nuclear Medicine T = Therapy (Radiat)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
(Faxton St Luke's) Herkimer Co CC	Utica	NY		Х				Р		
Finger Lakes Community College	Canandaigua	NY				Х				
Genesee Community College	Batavia	NY				Х		Р		Χ
Helene Fuld College of Nursing	New York	NY				Х				
Hudson Valley Community College	Troy	NY	Н	Х		Χ			S	Χ
Jamestown Community College	Jamestown	NY				Х		0		
Jefferson Community College	Watertown	NY				Х				
Keuka College	Keuka Park	NY				Χ				
Kingsborough CC of CUNY	Brooklyn	NY				Х		Р		
LaGuardia Community College	Long Island	NY				Χ		O P		
Long Island College Hospital CUNY	Brooklyn	NY				Χ			RS	
Long Island University CW Post	Brookville	NY							R	Χ
Maria College	Albany	NY				Χ		0		
Medgar Evers College CUNY	Brooklyn	NY				Х				
Mercy College	Dobbs Ferry	NY						0		
Mohawk Valley Community College	Utica	NY			Χ	Χ				Χ
Molloy College	Rockville Center	NY							N	Χ
Monroe Community College	Rochester	NY	АН	Х	Х	Χ			R	
Nassau Community College	Garden City	NY				Х		Р	Т	Χ
New York City Col Tech CUNY	Brooklyn	NY	Н			Х			R	
New York University	New York	NY	Н						S	
Niagara County Community College	Sanborn	NY				Х		Р	R	
North Country Community College	Saranac Lake	NY							R	
Onondaga Community College	Syracuse	NY			Χ	Χ		Р		Χ
Orange County Community College	Middletown	NY	Н			Х		O P	R	
Queensborough CC of CUNY	Bayside	NY				Х				
Rochester Institute of Technology	Rochester	NY							S	
St. Elizabeth Med Center(Col of Nursing)	Utica	NY				Χ				
St. John's University	Fresh Meadows	NY		Р					R	
St. Joseph's College of Nursing	Syracuse	NY				Χ				
Suffolk County Community College	Selden	NY			Х	Χ		ΟP		
Sullivan County Community College	Loch Sheldrake	NY				Χ				
SUNY College of Ag & Tech at Morrisville	Morrisville	NY				Χ				
SUNY College of Technology at Alfred	Alfred	NY				Χ				
SUNY College of Technology at Canton	Canton	NY	Н					Р		
SUNY College of Technology at Delhi	Delhi	NY PT = Padiogram			Sonograph	Χ				Pospirator

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
SUNY Educational Opportunity Center	Buffalo	NY	Α							
SUNY Rockland Community College	Suffern	NY				Χ		0		
SUNY Upstate Medical University	Syracuse	NY							RT	Х
Tompkins Cortland Community College	Dryden	NY				Χ				
Trocaire College	Buffalo	NY			Χ	Χ			R	
Touro College	New York	NY						O P		
University at Buffalo SUNY	Buffalo	NY							N	
Ulster County Community College	Stone Ridge	NY				Χ				
Utica College	Utica	NY				Χ				
Villa Maria College of Buffalo	Buffalo	NY						Р		
Wagner College	Staten Island	NY				Χ				
Westchester Community College of SUNY	Valhalla	NY							R	Χ
York College of CUNY	Jamaica	NY				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bucks County Community College	Newtown	PA				Χ			R	
Butler County Community College	Butler	PA				Χ		Р		
California University of Pennsylvania	California	PA						Р		
Central Pennsylvania College	Summerdale	PA						Р		
Cedar Crest College	Allentown	PA				Χ			N	
Clarion University of Pennsylvania	University Park	PA				Χ				
Clarion University Venago Campus	Senaca	PA								X
Community College of Allegheny County	Pittsburg	PA			Χ	Χ	Χ	0	ΝT	Χ
Com College of Allegheny Co Boyce	Monroeville	PA						Р	R S	
Community College of Beaver County	Monaca	PA				Χ				
Community College of Philadelphia	Philadelphia	PA	Н			Χ			R	X
Delaware County Community College	Media	PA				Χ				X
Desales University	Center Valley	PA				Χ				
Drexel University	Philadelphia	PA				Χ			R	
East Stroudsburg University of PA	East Stroudsburg	PA				Χ				
Gannon University	Erie	PA							R	X
Gwynedd Mercy College	Gwynedd Mercy	PA			Χ	Χ			Т	Χ
Harcum College	Bryn Mawr	PA	АН			Χ		Р	R	
Harrisburg Area Community College	Harrisburg	PA	АН	X		X			S	X
Harrisburg Area CC Lancaster	Lancaster	PA							R	
Holy Family University	Philadelphia	PA							R	
Indiana University of Pennsylvania	Pittsburg	PA PT = Padiogram					stic Modice			X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Kutztown University	Kutztown	PA				Х				
La Roche College	Pittsburg	PA				Х				
Lackawanna College	Scranton	PA							S	
Lancaster Gen Col of Nursing & H Sci	Lancaster	PA				Х			RNS	Х
Lehigh Carbon Community College	Schnecksville	PA				Х		O P		
Lock Haven University of Pennsylvania	Clearfield	PA				Х				
Luzerne County Community College	Nanticoke	PA	АН			Х				Х
Manor College	Jenkintown	PA	АН							
Mansfield University	Mansfield	PA				Х			R	Х
Marywood University	Scranton	PA				Х				
Mercyhurst College	North East	PA				Х		Р		Х
Millersville University	Millersville	PA				Х				Χ
Misericordia Univeristy	Dallas	PA							RS	
Montgomery County Community College	Blue Bell	PA	Н			Х			R	
Mount Aloysius College	Cresson	PA				Х		Р		
Neumann College	Aston	PA				Х				
Northampton Community College	Bethlehem	PA	Н			Х			RS	
Pennsylvania College of Technology	Williamsport	PA	Н	Х	Χ	Х		0	R	
Pennsylvania State University	University Park	PA				Х		0	R	
Pennsylvania State University Berks	Reading	PA						0		
Pennsylvania State University DuBois	DuBois	PA						O P		
Pennsylvania State University Hazelton	Hazelton	PA						Р		
Pennsylvania State University Mont Alto	Mont Alto	PA						Р		
Pennsylvania State University Shenango	Shenango	PA						Р		
Reading Area Community College	Reading	PA				Х				Χ
Robert Morris University	Moon Township	PA							N	
Slippery Rock University	Slippery Rock	PA				Χ				
Thaddeus Stevens College	Lancaster	PA								Χ
Thomas Jefferson University	Philadelphia	PA							RNST	
University of Pittsburg	Pittsburg	PA	Н							
University of Pittsburgh at Bradford	Bradford	PA				Х				
University of Pittsburgh at Johnstown	Johnstown	PA								Χ
University of Pittsburgh at Titusville	Titusville	PA				Х		Р		
West Chester University	Bryn Mawr	PA								Χ
Westmoreland County CC	Youngwood	PA	АН			Х				
York College of PA	York	PA Padiogram			Conograph					X

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School		City	State	D	EMP	HIM	N	Р	Т	RT	R
Howard University		Washington	DC	Η						Т	
University of the District of	of Columibia	Washington	DC				Х				
A = Assisting (Dental)	O = Occupation	nal (Therapy)) RT = Radiography		S = Sonography (Diagnostic Medical)					R = F	Respiratory
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Southern Association of Colleges and Schools

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Alabama Southern Community College	Monroeville	AL				Х				
Bevill State Community College	Jasper	AL		Х		Х				
Bishop State Community College	Mobile	AL		Х	Χ	Х		Р		
(John C.) Calhoun Community College	Decatur	AL	Α	Х		Х				
Central Alabama Community College	Alexander City	AL				Х				
(James H.) Faulkner State CC	Bay Minette	AL	Α			Х				
Gadsden State Community College	Gadsden	AL		Х		Х			R	
George C. Wallace Community College	Dothan	AL				Х	Х	Р	R	
George Corley Wallace State CC	Selma	AL				Х				
Jefferson Davis Community College	Brewton	AL				Х				
Jefferson State Community College	Birmingham	AL		Χ		Х		Р	R	
Lurleen B. Wallace Community College	Andalusia	AL		Х		Х				
Northeast Alabama Community College	Rainsville	AL		Х		Х				
Northwest-Shoals Community College	Muscle Shoals	AL		Х		Х				
Oakwood University	Huntsville	AL				Χ				
Shelton State Community College	Tuscaloosa	AL		Х		Х				Х
Snead State Community College	Boaz	AL				Х				
Southern Union State Community College	Wadley	AL		Χ		Χ			R	
Troy University	Troy	AL				Х				
Tuskegee University	Tuskegee	AL				Χ				
University of Alabama at Birmingham	Birmingham	AL							ΝT	Χ
University of Mobile	Mobile	AL				Х				
University of South Alabama	Mobile	AL		Х					ST	Χ
(The) University of West Alabama	Livingston	AL				Χ				
Wallace State Community College	Hanceville	AL	АН	Χ		Χ		0	RS	Χ
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bethune Cookman College	Daytona Beach	FL				Χ				
Brevard Community College	Cocoa	FL	АН	Χ					R	
Broward Community College	Coconut Creek	FL	АН	Χ	Χ	Χ		Р	S	Χ
College of Central Florida	Ocala	FL	Α	Χ	Χ	Χ		Р		
Daytona State College	Daytona	FL	АН	Х	Χ	Χ		O P		Χ
Edison State College	Fort Myers	FL	Н	Х		Χ			R	Χ
FL Agricultural & Mechanical University	Tallahassee	FL				Χ				Χ
Florida Gateway College	Lake City	FL		Χ				Р		
Florida Hospital College of Hlth Sciences	Orlando	FL Dadia area				Χ	atia Madia	0	RNS) : t

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Florida National College	Hialeah	FL								Χ
Florida State College at Jacksonville	Jacksonville	FL	Н	Х	Χ	Х		Р		Χ
Gulf Coast Community College	Panama City	FL	АН	Х		Х		Р	R	Χ
Hillsborough Community College	Tampa	FL	АН			Х			RNST	Χ
Indian River State College	Fort Pierce	FL	АН	Х	Χ	Х		Р	R	Χ
Keiser University Fort Lauderdale	Fort Lauderdale	FL				Х		O P	RS	Χ
Lake Sumter Community College	Leesburg	FL			Χ	Х				
Miami Dade College	Miami	FL	Н	Х	Χ	Х		Р	RS	Χ
Northwest Florida State College	Niceville	FL	Α							
Nova Southeastern University	Ft. Lauderdale	FL							S	
Palm Beach State College	Lake Worth	FL		Х					RS	Χ
Pasco Hernando Community College	New Port Richey	FL	Н	Х		Х				
Pensacola State College	Pensacola	FL		Х						
Polk State College	Winter Haven	FL		Х	Х	Х		O P	R	Χ
Saint Petersburg College	Pinellas	FL	Н	Х		Х		Р	R	Χ
Santa Fe College	Gainesville	FL		Х	Χ				RN	Χ
Seminole State College	Sanford	FL		Х				Р		Χ
South Florida Community College	Avon Park	FL	АН						R	
South University	Royal Palm Beach	FL						Р		
St. John's River Community College	Orange Park	FL			Χ					Χ
State College of FL Manatee Sarasota	Bradneton	FL	Ι			Χ		O P	R	
Tallahassee Community College	Tallahassee	FL	ΑН	Χ						Χ
University of Central Florida	Orlando	FL							R	Χ
University of Tampa	Tampa	FL				Χ				
Valencia Community College	Orlando	FL	Η	Χ		Χ			RS	Χ
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Abraham Baldwin Agricultural College	Tifton	GA				Χ				
Albany State University	Albany	GA				X				
Albany Technical College	Albany	GA	Α						R	
Armstrong Atlantic State University	Savannah	GA	Н						RNT	Χ
Athens Technical College	Athens	GA	АН			Χ		Р	RS	Χ
Atlanta Technical College	Atlanta	GA	Α		Χ					
Augusta State University	Augusta	GA				Χ				
Augusta Technical College	Augusta	GA	Α					0		Χ
Bainbridge College	Bainbridge	GA				Χ				
Central Georgia Technical College	Macon	GA	Н							

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Chattahoochee Tech College North Metro	Acworth	GA						Р	R	
Clayton State University	Morrow	GA	Н							
College of Coastal Georgia	Brunswick	GA				Х			R	
Columbus State University	Columbus	GA				Χ				
Columbus Technical College	Columbus	GA	ΑН			Χ			R	Х
Dalton State College	Dalton	GA				Χ			R	Χ
Darton College	Albany	GA	Ι			Χ		O P		Χ
Emory University School of Medicine	Atlanta	GA							R	
Georgia College and State University	Milledgeville	GA				Х				
Georgia Highlands College	Rome	GA	Η			Χ				
Georgia Northwestern Technical College	Rock Spring	GA	Α		Χ	Χ		0	RNST	Χ
Georgia Perimeter College	Clarkson	GA	Η			Χ				
Georgia Southwestern State University	Americus	GA				Χ				
Gordon College	Barnesville	GA				Х				
Gwinnett Technical College	Lawrenceville	GA	Α	Х					R	Х
Lagrange College	LaGrange	GA				Χ				
Lanier Technical College	Oakwood	GA	АН						R	
Macon State College	Macon	GA			Χ	Χ				Χ
Medical College of Georgia	Augusta	GA	Η						NST	Х
Middle Georgia College	Cochran	GA	Α			Χ		0		
Middle Georgia Technical College	Warner Robbins	GA	Ι						R	
North Georgia College & State University	Dahlonega	GA				Χ				
Okefenokee Technical College	Waycross	GA							R	Χ
Piedmont College	Demorest	GA				Χ				
Savannah Technical College	Savannah	GA	Α							
South Georgia College	Douglas	GA				Χ				
South University	Savannah	GA						Р		
Southeastern Technical College	Vidalia	GA	Η				Χ		R	
Southern Crescent Technical College	Griffin	GA	Α						R	Х
Southwest Georgia Technical College	Thomasville	GA				Χ	Х			Χ
Thomas University	Thomasville	GA				Χ				
West Georgia Technical College	Waco	GA	Η			Χ			R	
West Georgia Technical College LaGrange	LaGrange	GA							R	
Wiregrass Georgia Technical College	Valdosta	GA	АН							

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Ashland Community & Technical College	Ashland	KY				Х				
Bellarmine University	Louisville	KY								Χ
Big Sandy Community & Tech College	Prestonsburg	KY	Н							Χ
Bluegrass Community & Technical College	Lexington	KY	АН			Χ			RN	Χ
Bowling Green Technical College	Bowling Green	KY							R	Χ
Eastern Kentucky University	Richmond	KY		Χ		Χ				
Elizabethtown Com & Technical College	Elizabetown	KY				Χ			R	Χ
Hazard Community & Technical College	Hazard	KY							R	
Henderson Community College	Henderson	KY	Н			Χ				
Hopkinsville Community College	Hopkinsville	KY				Χ				
Jefferson Community & Technical College	Louisville	KY			Χ	Χ	Χ	O P	RNS	Χ
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Kentucky State University	Frankfort	KY				X				
Madisonville Community College	Madisonville	KY				Χ		O P	R	Χ
Midway College	Midway	KY				Χ				
Morehead State University	Morehead	KY				Χ			R S	
Northern Kentucky University	Highland Heights	KY				Χ			R	Χ
Owensboro Com & Technical College	Owensboro	KY							R	
Somerset Community College	Somerset	KY				Χ		Р	R	Χ
Southeast Kentucky Com & Tech College	Cumberland	KY				Χ		Р	R	Χ
Sullivan University	Louisville	KY					Χ			
Thomas More College	Crestview Hills	KY				Χ				
University of Louisville	Louisville	KY	Н							
West Kentucky Com & Technical College	Paducah	KY	Α			X		Р	R S	Χ
Western Kentucky University	Bowling Green	KY	Н		X	X				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bossier Parrish Community College	Bossier City	LA		X			Χ	Р		Χ
Delgado Community College	New Orleans	LA		X	Χ	Х	Χ	O P	RNST	Χ
Dillard University	New Orleans	LA				Х				
Grambling State University	Grambling	LA				Х				
Louisiana College	Pineville	LA						Р		
Lousiana State University	New Orleans	LA	Н							Χ
Lousiana State University at Alexandria	Alexandria	LA				Χ	X		R	
Lousiana State University at Eunice	Eunice	LA				Χ			RS	Χ
Louisiana Tech College West Jefferson	Metairie	LA								Χ
Nicholls State University	Thibodaux	LA				X	atia Madia			X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Northwestern State University of LA	Shreveport	LA				Х			R	
Our Lady of Holy Cross College	New Orleans	LA				Х			R	Χ
Lousiana Tech University	Ruston	LA				Х				
Loyola University New Orleans	New Orleans	LA				Х				
McNeese State University	Lake Charles	LA				Х			R	
Our Lady of the Lake College	Baton Rogue	LA				Χ		Р	R	Χ
Southern University & A&M Baton Rogue	Baton Rogue	LA	Ι			Χ				
Southern University at Shreveport	Shreveport	LA	Η		Χ	Χ			R	Χ
University of Louisiana at Monroe	Monroe	LA	Н					0	R	
School	City	State	D	EMP	MIH	N	Р	Т	RT	R
Alcorn State University	Natchez	MS				Χ				
Coahoma Community College	Clarksdale	MS								Χ
Copiah Lincoln Community College	Wesson	MS				Χ			R	Χ
East Central Community College	Decatur	MS		Χ		Χ				
East Mississippi Community College	Scooba	MS		Χ						
Hinds Community College	Jackson	MS	Α	Χ	Χ	Χ		Р	RS	Χ
Holmes Community College	Grenada	MS		Χ		Х		0		
Itawamba Community College	Fulton	MS		Χ	Χ	Χ		O P	RS	Χ
Jones County Junior College	Ellisville	MS		Χ		Χ	Χ		R	
Meridian Community College	Meridian	MS	АН			Χ		Р	R	Χ
Mississippi Delta Community College	Moorhead	MS	Ι			Χ			R	
Mississippi Gulf Coast Community College	Perkinston	MS		Χ		Χ			R	Χ
Mississippi University for Women	Columbus	MS				Χ				
Northeast Mississippi Community College	Booneville	MS	Η			Χ			R	Χ
Northwest Mississippi Community College	Senatobia	MS		Χ		Χ				Χ
Pearl River Community College	Poplarville	MS	ΑН			Χ		O P	R	Χ
Southwest Mississippi Community College	Summit	MS				Χ				
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Alamance Community College	Graham	NC	Α							
Asheville Buncombe Tech Commy College	Asheville	NC	ΑН						RS	
Barton College	Wilson	NC				Χ				
Brunswick Community College	Supply	NC			Χ					
Cabarrus College of Health Sciences	Concord	NC				Χ		0		
Caldwell Community Col & Tech Institute	Hudson	NC						Р	RNS	
Cape Fear Community College	Wilmington	NC	ΑН			Χ	Χ	0	R S	
Central Carolina Community College	Sanford	NC Dadia man	АН		`		atia Madia			Danimata m

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography
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S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

R = Respiratory

Nuclear Medicine T = Therapy (Radiation

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Central Piedmont Community College	Charlotte	NC	АН					Р		Χ
Cleveland Community College	Shelby	NC							R	
Carolinas College of Health Sciences	Charlotte	NC							R	
Carteret Community College	Morehead City	NC							R	Χ
Catawba Valley Community College	Hickory	NC	Н	Х	Χ	Х			R	Χ
Coastal Carolina Community College	Jacksonville	NC	ΑН							
College of the Albemarle	Elizabeth City	NC				Х				
Davidson County Community College	Lexington	NC			Χ	Х				
Durham Technical Community College	Durham	NC				Х	Х	0		Χ
East Carolina University	Greenville	NC				Х				
Edgecombe Community College	Rocky Mount	NC							R	Χ
Fayetteville Technical Community College	Fayetteville	NC	АН			Х		Р	R	Χ
Forsyth Technical Community College	Winston Salem	NC	АН				Х		RNST	Χ
Gardner Webb University	Boiling Springs	NC				Х				
Guilford Technical Community College	Jamestown	NC	АН					Р		
Halifax Community College	Weldon	NC	Н							
Johnston Community College	Smithfield	NC							RS	
Lenoir Community College	Kinston	NC							R	
Martin Community College	Williamston	NC	Α					Р		
McDowell Technical Community College	Marion	NC			Χ					
Mitchell Community College	Statesville	NC				Х				
Montgomery Community College	Troy	NC	Α							
Nash Community College	Rocky Mount	NC						Р		
North Carolina Ag & Tech State University	Greensboro	NC				Х				
North Carolina Central University	Durham	NC				Х				
Pitt Community College	Greenville	NC				Χ		0	RST	Χ
Queens University at Charlotte	Charlotte	NC				Χ				
Randolph Community College	Asheboro	NC				Х				
Robeson Community College	Lumberton	NC								Χ
Rockingham Community College	Wentworth	NC								Χ
Rowan Cabarrus Community College	Salisbury	NC	Α			Χ			R	
Sandhills Community College	Pinehurst	NC							R	Χ
Stanly Community College	Albemarle	NC								Χ
South Piedmont Community College	Monroe	NC							S	
Southwestern Community College	Sylva	NC			Χ			Р	R	Χ

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Nuclear Medicine
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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Surry Community College	Dobson	NC						Р		
University of North Carolina Chapel Hill	Chapel Hill	NC							R	
University of North Carolina Greensboro	Greensboro	NC				Х				
University of North Carolina Wilmington	Wilmington	NC				Χ				
Vance Granville Community College	Creedmoor	NC							R	
Wake Technical Community College	Raleigh	NC	АН						R	
Wayne Community College	Goldsboro	NC	ΑН			Χ				
Western Carolina University	Cullahee	NC		Χ						
Western Piedmont Community College	Morganton	NC	Α			Χ				
Wilkes Community College	Wilkesboro	NC	Α						R	Χ
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Aiken Technical College	Aiken	SC	Α			Х	Х		R	
Central Carolina Technical College	Sumter	SC				X				
Charleston Southern University	Charleston	SC				Χ				
Florence Darlington Technical College	Florence	SC	АН		Х	X			R	Х
Francis Marion University	Florence	SC				X				
Greenville Technical College	Greenville	SC	ΑН	X		X	X	ΟP	RS	Χ
Horry Georgetown Technical College	Myrtle Beach	SC	АН	Х		X	Х	Р	RS	
Lander University	Greenwood	SC				X				
Midlands Technical College	Columbia	SC	АН		Х	Х	Х	Р	RN	Х
Orangeburg Calhoun Technical College	Orangeburg	SC				Х			R	Х
Piedmont Technical College	Greenwood	SC				Х	Х		R	Х
Spartanburg Community College	Spartanburg	SC	Α			Х	X		R	Х
Technical College of the Lowcountry	Beaufort	SC				X		Р	R	
Tri county Technical College	Pendleton	SC	Α			Х	Х			
Trident Technical College	Charleston	SC	АН	X		X	X	ΟP	R	X
University of South Carolina Aiken	Aiken	SC				X				
York Tech Col University of SC Lancaster	Rock Hill	SC	H			Х	X		R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Aquinas College	Nashville	TN				Χ				
Austin Peay State University	Clarksville	TN				X				
Baptist Memorial Col of Health Science	Memphis	TN							NST	Χ
Chattanooga State Community College	Chattanooga	TN	АН	X	Χ	Χ	X	P	RNST	Х
Cleveland State Community College	Cleveland	TN				X				
Columbia State Community College	Columbia	TN		X		X			R	Χ
Cumberland University	Lebanon	TN				Х	atia Madia	<u> </u>	<u> </u>	Daaninatan

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R = Respiratory

nerapy) N = Nuclear Medicine T = Therapy (Radia)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Dyersburg State Community College	Dyersburg	TN				Х				
East Tennessee State University	Johnson City	TN	Н						R	Х
Jackson State Community College	Jackson	TN		Х		Х		Р	R	Х
Lincoln Memorial University	Harrogate	TN				Х				
Lipscomb University (Vanderbilt)	Nashville	TN				Х				
Middle Tennessee State University	Murfreesboro	TN				Х				
Motlow State Community College	Lynchburg	TN				Х				
Nashville State Tech Community College	Nashville	TN						0		
Northeast State Community College	Kingsport	TN	Α	Х		Х				
Roane State Community College	Harriman	TN	Н	Х		Х	Х	O P	R	Х
South College	Knoxville	TN				Х		Р	RN	
Southern Adventist University	Collegedale	TN				Х				
Southwest Tennessee Community College	Memphis	TN		Х		Х		Р	R	
Tennessee State University	Nashville	TN	Н			Х				Х
Tennessee Technological University	Cookeville	TN		Х						
University of Tennessee at Martin	Martin	TN				Х				
Volunteer State Community College	Gallatin	TN	Α	Х	Х			Р	RS	Х
Walters State Community College	Morristown	TN		Х		Х	Χ	Р		Х
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Alvin Community College	Alvin	TX				Χ			S	Χ
Amarillo College	Amarillo	TX	Н			Χ	Χ	ΟP	RNT	Χ
Angelina College	Lufkin	TX					Χ		RS	Χ
Angelo State University	San Angelo	TX				Χ				
Austin Community College	Austin	TX	Н	Χ		Χ	Χ	ΟP	RS	
Blinn College	Bryan	TX	Н			Χ		Р	R	
Brazosport College	Lake Jackson	TX		Χ						
Brookhaven College	Farmers Branch	TX		Χ		Χ			R	
Central Texas College	Killeen	TX				Χ				
Cisco College	Abilene	TX								Χ
Coastal Bend College	Beeville	TX	Н						R	
College of the Mainland	Texas City	TX		X	X	X	X			
Collin County Community College District	McKinney	TX	Н		Χ	Χ				Χ
Del Mar College	Corpus Christi	TX	ΑН		Х	Χ	Χ	ΟP	RNS	Χ
				1	1	- 1/			RS	Χ
El Centro College	Dallas	TX				X				
	Dallas El Paso Galveston	TX TX TX	АН	X	Х	X X	Х	Р	R S R N T	X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Grayson County College	Denison	TX	Α			Х				
Houston Baptist University	Houston	TX				Х				
Houston Community College System	Houston	TX		Х	Х			O P	RNS	Χ
Howard College	Big Spring	TX	Н		Х	Х			R	Χ
Kilgore College	Kilgore	TX				Х		Р		
Lamar Institute of Technology	Beaumont	TX	Н		Х				RS	Χ
Lamar State College Orange	Orange	TX	Α				Х			
Lamar University	Beaumont	TX				Х				
Laredo Community College	Laredo	TX				Х		O P	R	
Lee College	Baytown	TX			Х	Х				
Lone Star College Cy Fair	Cypress	TX				Х			RS	
Lone Star College Kingwood	Kingqwood	TX	Н			Х		0		Χ
Lone Star College Montgomery	Conroe	TX				Х		Р	R	
Lone Star College North Harris	Houston	TX		Х		Х	Х			Χ
Lone Star College Tomball	Tomball	TX				Х	Х	0		
Lubbock Christian Universitiy	Lubbock	TX				Х				
McLennan Community College	Waco	TX			Χ	Х		Р	R	Χ
Midland College	Midland	TX				Х			RS	Χ
Midwestern State University	Wichita Falls	TX	Н						R	Χ
Navarro College	Corsicana	TX				Х		0		
North Central Texas College	Gainesville	TX				Х				
Northeast Texas Community College	Mt. Pleasant	TX	Н					Р	R	
Northwest Vista College	San Antonio	TX					Х			
Odessa College	Odessa	TX				Х		Р	R	
Panola College	Carthage	TX			Χ	Х		0		
Paris Junior College	Paris	TX				Χ			R	
Prairie View A&M University	Houston	TX				Χ				
Richland College	Dallas	TX					Х			
San Antonio College	San Antonio	TX	Α			Х				
San Jacinto College Central	Pasadena	TX		Χ		Χ			R	Χ
San Jacinto College North	Houston	TX		Χ	Χ		Х			
San Jacinto College South	Houston	TX				Χ	Х	Р		
South Plains College	Levelland	TX		Х		Χ				Χ
South Texas College	McAllen	TX			Χ		Х	O P		Χ
St. Phillip's College	San Antonio	TX						O P	R	Χ
A = Assisting (Dental) O = Occupa	tional (Therapy)	RT = Radiogram	hv.	S = 0	Sonograph	v (Diagno	stic Madic	al)	R – F	Respiratory

O = Occupational (Therapy)
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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Stephen F. Austin State University	Nacogdoches	TX				Х				
Tarrant County College	Fort Worth	TX	Н	Х	Х	Х		Р	R	Χ
Temple College	Temple	TX	Н			Х				Χ
Texarkana College	Texarkana	TX				Х				
Texas A&M International University	Laredo	TX				Х				
Texas Southern University	Houston	TX								Χ
Texas State Tech College at Harlingen	Harlingen	TX	АН		Х					
Texas State Technical College at Waco	Waco	TX	Α							
Texas State University San Marcos	San Marcos	TX							T	Х
Texas Women's University	Denton	TX	Н							
Trinity Valley Community College	Kaufman	TX				Х				
Tyler Junior College	Tyler	TX	Η						RS	Χ
U of TX at Brownsville & TX S'most Col	Brownsville	TX		Х		Х			RS	Χ
University of Texas Hlth Sci Cnt Houston	Houston	TX	Н							
U of Texas Hlth Sci Cnt San Antonio	San Antonio	TX	Η	Χ						Χ
U of Texas MD Anderson Cancer Center	Houston	TX							RT	
U of Texas Medical Branch at Galveston	Galveston	TX								Χ
U of Texas Southwestern Medical Center	Dallas	TX							Т	
University of the Incarnate Word	San Antonio	TX							N	
Vernon College	Wichita Falls	TX			Χ		Χ			
Victoria College	Victoria	TX				Χ				Χ
Virginia College Austin	Austin	TX					Χ			
Wayland Baptist University	San Antonio	TX				Χ				
Weatherford College	Weatherford	TX				Χ			R	Χ
Wharton County Junior College	Wharton	TX	Н	X	X			Р	R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Blue Ridge Community College	Weyers Cave	VA				X				
Central Virginia Community College	Lynchburg	VA		X					R	Χ
Dabney S. Lancaster Community College	Clifton Forge	VA				X				
ECPI Col of Technology Virginia Beach	Virginia Beach	VA				X		Р	R	
Germanna Community College	Locust Grove	VA				Х				
Hampton University	Hampton	VA				X				
J. Sargeant Reynolds Community College	Richmond	VA	Α	X		X				X
Jefferson College of Health Sciences	Roanoke	VA		X				O P		X
John Tyler Community College	Midlothian	VA				X				
Mountain Empire Community College	Big Stone Gap	VA DT Dadiagram					atia Madia			X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Norfolk State University	Norfolk	VA				Х				
Northern Virginia Community College	Springfield	VA	Н	Χ	Χ	Χ		Р		Χ
Old Dominion University	Norfolk	VA	Н						N	
Patrick Henry Community College	Martinsville	VA				Χ				
Piedmont Virginia Community College	Charlottesville	VA		X		Х			R	
Shenandoah University	Winchester	VA								Χ
Southwest Virginia Community College	Richlands	VA		Х				0	R	Χ
Thomas Nelson Community College	Hampton	VA	Н			Х				
Tidewater Community College	Portsmouth	VA		Х	Χ	Х		O P	RS	Χ
Virginia Commonwealth University	Richmond	VA		Х		Х			RNT	
Virginia Highlands Community College	Abingdon	VA	Н			Х		0		
Virginia Western Community College	Roanoke	VA	Н						RT	
Wytheville Community College	Wytheville	VA	Н			X		P		

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North Central Association of Colleges and Schools

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Arizona Western College	Yuma	AZ				Х			R	
Central Arizona College	Coolidge	AZ				Χ			R	
Chandler Gilbert Community College	Chandler	AZ				Х				
Cochise College	Sierra Vista	AZ				Х				
Estrella Mountain Community College	Avondale	AZ				Χ				
Gateway Community College	Phoenix	AZ				Χ		Р	RNST	Χ
Glendale Community College	Glendale	AZ				Χ				
Mesa Community College	Mesa	AZ	Н			Χ				
Mesa Community College-Boswell	Sun City	AZ				Χ				
Mohave Community College	Lake Havasu City	AZ	Н			Χ		Р		
Northern Arizona University Sch of H Prof	Flagstaff	AZ	Н							
Northland Pioneer College	Holbrook	AZ				Χ				
Paradise Valley Community College	Phoenix	AZ				Χ				
Phoenix College	Phoenix	AZ	АН		Χ	Χ				
Pima County Community College	Tucson	AZ	АН			Χ	Χ		R	Χ
Rio Salado College	Tempe	AZ	АН							
Scottsdale Community College	Scottsdale	AZ				Χ				
Yavapai College	Prescott	AZ				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Arkansas Northeastern College	Blytheville	AR	Α	Х		Χ				1
Arkansas State University	State University	AR				Χ		Р	RST	
Arkansas State University Beebe	Searcy	AR		Х		Χ	Χ			
Arkansas St University Mountain Home	Mountain Home	AR								Χ
Arkansas Tech University	Russellville	AR		Х		Χ				
Arkansas Tech University Ozark	Ozark	AR						Р		
Black River Technical College	Pocahontas	AR		Х						Χ
East Arkansas Community College	Forrest City	AR		Х		Χ				
Harding University	Searcy	AR				Χ				
NP Community College at Hot Springs	Hot Springs	AR		Х	Х	Χ			R	Χ
North Arkansas College	Harrison	AR		Х		Χ			R	
		• •		Х				Р		Х
Northwest Arkansas Community College	Bentonville	AR								
Northwest Arkansas Community College Phillips Com College of the U of Arkansas	Bentonville Helena-W Helena	AR				Х				
			A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Х		0	RN	X

A = Assisting (Dental) H = Hygiene (Dental)

O = Occupational (Therapy)
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S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

R = Respiratory

RT = Radiography N = Nuclear Medicine

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Southeast Arkansas College	Pine Bluff	AR		Х		Χ			R	Χ
Southern Arkansas University	Magnolia	AR				Х				
University of Arkansas at Little Rock	Little Rock	AR	Н	Х		Х				
University of Arkansas at Monticello	Monticello	AR		Х		Х				
University of Arkansas at Pine Bluff	Pine Bluff	AR				Χ				
U of Arkansas for Med Sci Fayetteville	Fayeteville	AR							R	
U of Arkansas for Med Sci Little Rock	Little Rock	AR							RNS	Χ
U of Arkansas for Med Sci Texarkana	Texarkana	AR							R	Χ
University of Arkansas CC at Batesville	Batesville	AR		Х		Х				
University of Arkansas CC at Hope	Норе	AR		Х						Х
University of Arkansas-Fort Smith	Fort Smith	AR	Н			Х			RS	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Aims Community College	Greeley	CO		Χ						
Arapahoe Community College	Englewood	CO		X			X	Р		
Colorado Mountain College	Edwards	CO		Х						
Colorado Northwest Community College	Rangely	CO	Н							
Colorado State University-Pueblo	Pueblo	CO				Χ				
Community College of Aurora	Denver	CO		Х						
Community College of Denver	Denver	CO	Н						R	
Front Range Com Col-Larimer Campus	Fort Collin	CO	Α			Χ	Х			
Mesa State College	Grand Junction	CO							R	
Metropolitan State College of Denver	Denver	CO				Χ				
Morgan Community College	Fort Morgan	CO				Χ		Р		
Otero Junior College	La Junta	CO				Χ				
Pikes Peak Community College	Colorado Springs	CO	Α	X			Χ			
Pueblo Community College	Pueblo	CO	ΑН	Χ		Χ		O P		Χ
Peublo Community College Southwest	Durango	CO								Χ
Red Rocks Community College	Arvada	CO							R	
University of Colorado at Denver at HSC	Aurora	CO				Χ			S	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Black Hawk College	Moline	IL				Χ		Р		
Bradley University	Peoria	IL				Χ				
Carl Sandburg College	Galesburg	IL	Н			Χ				
Chicago State University	Chicago	IL				Χ				
College of DuPage A - Assisting (Dental) O - Occupation	Glen Ellyn	IL RT – Radiograf	Н		X			Р	RNS	X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
College of Lake County	Grayslake	IL	Н		Х	Х			R	
Danville Area Community College	Danville	IL			Х				R	
Elgin Community College	Elgin	IL	Α			Х		Р	R	
Governors State University	University Park	IL				Х				
Heartland Community College	Normal	IL				Х			R	
Illinois Central College	Peoria	IL	Н			Х		O P	R	Χ
Illinois Eastern Community College	Olney	IL				Х			R	
Illinois Valley Community College	Oglesby	IL	Α			Х				
John A. Logan College	Carterville	IL	АН						S	
Joilet Junior College	Joliet	IL			Х	Х				
Kankakee College	Kankakee	IL								Х
Kaskaskia College	Centralia	IL	Α			Х		Р	R	Χ
Kishwaukee College	Malta	IL							R	
Lake Land College	Mattoon	IL	Н			Х		Р		
Lakeview College of Nursing	Danville	IL				Х				
Lewis & Clark Community College	Godfrey	IL	АН			Х		0		
Lincoln Land Community College	Springfield	IL				Х		0	R	Χ
Methodist College of Nursing	Peoria	IL				Х				
Midstate College	Peoria	IL			Χ					
Moraine Valley Community College	Palos Hills	IL			Х	Х			R	Χ
Morton College	Cicero	IL						Р		
Northwestern College	Rosemont	IL							R	
Oakton Community College	Des Plaines	IL			Χ	Χ				
Parkland College	Champaign	IL	Н			Х		0	R	Χ
Prairie State College	Chicago Heights	IL	Н			Χ				
Richland Community College	Decatur	IL				Χ				
Robert Morris College	Chicago	IL				Χ				
Rockford College	Rockford	IL				Х				
Rock Valley College	Rockford	IL	Н							Χ
Rush University	Chicago	IL							S	Χ
Saint Francis Med Cntr College of Nursing	Peoria	IL				Χ				
Sauk Valley Community College	Dixon	IL							R	
South Suburban College	South Holland	IL				Χ	Х	0		
Southern Illinois University Carbondale	Carbondale	IL	Н					Р	ST	
Southwestern Illinois College	Belleville	IL DT Dadiagram			X	Χ		Р	R	X

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
St. Augustine College	Chicago	IL								Χ
St. John's College	Springfield	IL				Х				
Trinity Col of Nursing & Health Sciences	Rock Island	IL				Х			R	Х
Triton College	River Grove	IL		Χ		Χ			RNS	Χ
William Rainey Harper College	Palatine	IL	Н			Х			R S	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Ball State University	Muncie	IN							R	
Bethel College	Mishawaka	IN				Х				
Indiana State University	Terre Haute	IN				Х				
Indiana University East	Richmond	IN				Х				
Indiana University Kokomo	Kokomo	IN							R	
Indiana University Northwest	Gary	IN	ΑН		Χ	Χ			R T	
Indiana U Purdue University Ft Wayne	Fort Wayne	IN	Η			Χ			R	
Indiana U Purdue University Indianapolis	Indianapolis	IN				Χ				
Indiana University School of Dentistry	Indianapolis	IN	АН							
Indiana University School of Medicine	Indianapolis	IN							RNT	
Indiana University South Bend	South Bend	IN	Η	X					R	
Ivy Tech Community College of Indiana	Indianapolis	IN				Χ				
Ivy Tech Com College Anderson Campus	Anderson	IN	ΑН							
Ivy Tech Community College Bloomington	Bloomington	IN		Χ	Χ				T	Χ
Ivy Tech Com College Central Indiana	Indianapolis	IN							R	Χ
Ivy Tech Community College Columbus	Columbus	IN		Χ						
Ivy Tech Community College East Central	Muncie	IN						Р		
Ivy Tech Community College Evansville	Evansville	IN		Χ						
Ivy Tech Community College Fort Wayne	Fort Wayne	IN		X						Χ
Ivy Tech Community College Gary	Gary	IN								Χ
Ivy Tech Community College Kokomo	Kokomo	IN	Α	Х						
Ivy Tech Community College Lafayette	Lafayette	IN	Α							X
Ivy Tech Community College Lawrence	Indianapolis	IN			Χ					
Ivy Tech Community College Marion	Marion	IN							R	
Ivy Tech Com College North Central	South Bend	IN								Χ
Ivy Tech Community College Northwest	Gary	IN						Р		
Ivy Tech Community College Sellarsburg	Sellarsburg	IN								Χ
Ivy Tech Community College South Bend	South Bend	IN	Н	Х						
Ivy Tech Community College Terre Haute	Terre Haute	IN		Х			- C - NA C -		R	Χ

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Purdue University Calumet	Hammond	IN				Χ				
Purdue University North Central	Westville	IN				Χ				
Saint Mary's College	Notre Dame	IN				Χ				
Sanford Brown College Indianapolis	Indianapolis	IN					Х			
University of Evansville	Evansville	IN				Χ		Р		
University of Indianapolis	Indianapolis	IN				Х		Р		
University of Saint Francis	Fort Wayne	IN				Χ		Р	R	
University of Southern Indiana	Evansville	IN	АН					0	RS	Χ
Vincennes University	Vincennes	IN		Х		Х		Р		
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Allen College	Waterloo	IA							R	
Briar Cliff University	Sioux City	IA				Χ				
Des Moines Area Community College	Ankeny	IA	ΑН			Χ				Χ
Hawkeye Community College	Waterloo	IA	АН							Χ
Indian Hills Community College	Ottumwa	IA						Р	R	
Iowa Central Community College	Fort Dodge	IA	Н						R	
Iowa Wesleyan College	Mount Pleasant	IA				Χ				
Iowa Western Community College	Council Bluffs	IA	АН							
Kirkwood Community College	Cedar Rapids	IA	АН	Х	Χ			O P		Χ
Mercy College of Health Sciences	Des Moines	IA		Х		Χ		Р	RNS	
North Iowa Area Community College	Mason City	IA				Χ		Р		
Northeast Iowa Tech Community College	Peosta	IA	Α						R	Χ
Southeastern Community College	West Burlington	IA								Χ
St. Luke's College	Sioux City	IA				Χ			R	Χ
Western Iowa Tech Community College	Sioux City	IA	Α	Х				Р		
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Barton County Community College	Great Bend	KS		Χ		Χ				
Butler County Community College	El Dorado	KS				Χ				
Cloud County Community College	Concordia	KS				Χ				
Coffeyville Community College	Coffeyville	KS		X						
Colby Community College	Colby	KS				Χ		Р		
Cowley College	Winfield	KS		Х						
Dodge City Community College	Dodge City	KS				Х				
Emporia State University	Emporia	KS				Χ				
Flint Hills Technical College	Emporia	KS	АН	Х						

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Fort Hays State University	Hays	KS							R	
Fort Scott Community College	Fort Scott	KS				Х				
Garden City Community College	Garden City	KS		Х		Х				
Hesston College	Hesston	KS				Х				
Hutchinson Community College	Hutchinson	KS		Х		Χ			R	
Johnson County Community College	Overland Park	KS	Н	Х		Χ				Χ
Kansas City Kansas Community College	Kansas City	KS		Х		Х		Р		Χ
Kansas Wesleyan University	Salina	KS				Χ				
Labette Community College	Parsons	KS				Χ			R	Χ
Manhattan Area Technical College	Manhattan	KS	Н			Х				
Neosho County Community College	Chanute	KS			Χ	Χ				
Newman University	Wichita	KS						0	R	Χ
North Central Kansas Technical College	Hays	KS				Χ	Χ			
Northwest Kansas Technical College	Goodland	KS								Χ
Pratt Community College	Pratt	KS				Χ				
Seward County Community College	Liberal	KS				Χ				Χ
Washburn University	Topeka	KS			Χ			Р	RS	Χ
Wichita Area Technical College	Wichita	KS	Α							
Wichita State University	Wichita	KS	Н							
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Andrews University	Berrien Springs	MI				Χ				
Baker College	Flint	MI			X					
Baker College of Allen Park	Allen Park	MI			X			O P		
Baker College of Auburn Hills	Auburn Hills	MI	АН						S	Χ
Baker College of Clinton Township	Clinton Township	MI							R	
Baker College of Flint	Flint	MI						Р		
Baker College of Jackson	Jackson	MI							Т	
Baker College of Owosso	Owosso	MI							RS	
Baker College of Port Huron	Port Huron	MI	ΑН							
Baker College of Muskegon	Muskegon	MI						ΟP	R	
Bay De Noc Community College	Escanaba	MI				Χ				
Davenport University	Grand Rapids	MI				Χ				
Delta College	University City	MI	ΑН			Χ		Р	RS	Χ
Ferris State University	Big Rapids	MI	Н		Χ	Χ			RNS	Χ
Finlandia University	Hancock	MI		8 - 6				Р		Posnirator

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine S = Sonography (Diagnostic Medical) T = Therapy (Radiation) R = Respiratory

= Nuclear Medicine
T = Therapy (Radiation

Grand Rapids Community College Grand Rapids MI A H X O R Grand Valley State University Grand Rapids MI X X X P R S X Henry Ford Community College Dackson MI X X X P R S X Jackson Community College Battle Creek MI H X X P R S X Kelloga Community College Battle Creek MI H X X R R Lake Michigan College Benton Harbor MI A X X R R Lake Michigan College Benton Harbor MI H X X R R Lake Michigan College Lake Michigan College MI H X X R R Lake Michigan College Lake Michigan College MI H X X N P R N MI M X X Y P R N MI	School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Henry Ford Community College	Grand Rapids Community College	Grand Rapids	MI	АН			Χ		0	R	
Jackson Community College	Grand Valley State University	Grand Rapids	MI							ST	
Kalamazoo Valley Community College Kalamazoo MI H X X Kellogq Community College Battle Creek MI H X R Lake Michigan College Benton Harbor MI A X R Lake Superior State University Sault Ste. Marie MI X X R Lansing Community College Clinton Township MI H X X O P N Mid Michigan Community College Clinton Township MI X X X O P N X Mid Kichigan Community College Harrison MI X X X P R M Monroe County Community College Monroe MI X X X P R X Morther Michigan University Marguette MI A H X X O P X Northwestern Michigan College Waterford MI A X X X X Schoolcraft Co	Henry Ford Community College	Dearborn	MI				Χ	Х	Р	RS	Х
Rellogg Community College Battle Creek MI	Jackson Community College	Jackson	MI							RS	Χ
Lake Michigan College Benton Harbor MI A X R Lake Superior State University Sault Ste. Marie MI X X S Lansing Community College Lansing MI H X X N R S Macomb Community College Clinton Township MI H X X O P N X Mid Michigan Community College Harrison MI X X X P R R Monroe County Community College Honroe MI X X Y P R R Muskegon Community College Flint MI A H X O P X Muskegon Community College Muskegon MI X X O P X Muskegon Community College Muskegon MI A X X X Northern Michigan College Traverse City MI A X X X Oakland Community College Waterford MI H X X X Scholcraft College Garden City	Kalamazoo Valley Community College	Kalamazoo	MI	Н	Χ						Χ
Lake Superior State University Lansing Community College Lansing MI H X X N R S Macomb Community College Clinton Township MI N MI	Kellogg Community College	Battle Creek	MI	Н					Р	R	
Lansing Community College	Lake Michigan College	Benton Harbor	MI	Α						R	
Macomb Community College Clinton Township MI X X DP N X Mid Michigan Community College Harrison MI X X P R Monroe County Community College Monroe MI X X P R (Charles Stewart) Mott Com College Flint MI A X OP X Muskegon Community College Muskegon MI A X OP X Northern Michigan University Marquette MI A X X X Northwestern Michigan College Waterford MI A X X X Oakland Community College Waterford MI H X X X Oakland Community College Garden City MI X X X X Schoolcraft College Garden City MI X X X X Southwestern Michigan College Detroit MI X X X Y Y Southwestern Michigan Flint MI H		Sault Ste. Marie	MI								
Mid Michigan Community College Harrison MI X X P R Monroe County Community College Monroe MI X X O P X Monroe County Community College Flint MI A H X O P X Muskegon Community College Muskegon MI X X O P X Northern Michigan University Marquette MI X X X X X X X X X X Northwestern Michigan College Traverse City MI A X X X X X X X X X X X X X X X X X X	Lansing Community College	Lansing	MI	Н	Х					RS	
Monroe County Community College Monroe MI A H X O P X (Charles Stewart) Mott Com College Flint MI A H X O P X Muskegon Community College Muskegon MI X Northern Michigan University Marquette MI X Northwestern Michigan College Traverse City MI A X Oakland Community College Waterford MI H X X R S Schoolcraft College Garden City MI X Southwestern Michigan College Dowagiac MI X X University of Detroit Mercy Detroit MI H X University of Michigan Flint Flint MI H X Washtenaw Community College Ann Arbor MI A X X P R Wayne County Com College District Detroit MI A H X X O X Wayne State University Detroit MI X X O X P R Anoka Ramsey Community College Anoka MN X P P Anoka Technical College Brainerd MN A X O D Central Lakes College White Bear Lake MN A H X R Dakota County Technical College Rosemount MN A Dunwoody College of Technology Mineapolis MN A MI A X R R R Danaca Technical College Rosemount MN A MN A R Dunwoody College of Technology Mineapolis MN A MI A H X R R Danaca Technical College Rosemount MN A MN A R MN A R Danaca Technology Mineapolis MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MN A R Danaca Technology Mineapolis MN MN A MI A R Danaca Technology Mineapolis MN MN A MI A R MI A H X A D R MI A H X	Macomb Community College	Clinton Township	MI			Χ	Χ		O P	N	Χ
Charles Stewart) Mott Com College	Mid Michigan Community College	Harrison	MI			Χ		Χ	Р	R	
Muskegon Community College Muskegon MI Northern Michigan University Marquette MI Northwestern Michigan College Traverse City MI A Oakland Community College Oakland Community College Oakland Community College Garden City MI Southfield MI Southfield MI Southwestern Michigan College Garden City MI Southwestern Michigan College Marquette MI	Monroe County Community College	Monroe	MI				Χ				Χ
Northern Michigan University Northwestern Michigan College Traverse City MI A Oakland Community College Waterford MI H X X X X Oakland Community College Southfield Southfield Southfield MI Schoolcraft College Garden City MI Southwestern Michigan College Dowagiac MI University of Detroit Mercy University of Michigan Ann Arbor MI H University of Michigan Flint Flint Washtenaw Community College Ann Arbor MI Wayne County Com College District Detroit MI Ann Arb MI MI Ann Arb MI Ann Arb MI Ann Arb Ann Arb MI MI Ann Arb MI Ann Arb MI MI Ann Arb Ann Arb MI Ann Arb MI Ann Arb Ann Arb Ann Arb Ann Arb MI Ann Arb Ann Arb	(Charles Stewart) Mott Com College	Flint	MI	АН			Χ		O P		Χ
Northwestern Michigan College Oakland Community College Oakland Community College Oakland Community College Oakland Community College Southfield Southfield MI Schoolcraft College Garden City MI Submission College Obwagiac MI V V V V V V V V V V V V V V V V V V	Muskegon Community College	Muskegon	MI				Χ				Χ
Oakland Community College Waterford MI H X X Oakland Community College Southfield Southfield MI R S Schoolcraft College Garden City MI X S Schoolcraft College Dowagiac MI X S University of Detroit Mercy Detroit MI H S University of Michigan Ann Arbor MI H S University of Michigan Flint Flint MI H T Wayne County Comcollege Ann Arbor MI A X X P Wayne County Com College District Detroit MI A H X O Wayne State University Detroit MI A H X O Wayne State University Detroit MI A H X O Anoka Ramsey Community College Coon Rapids MN X P Anoka Technical College Anoka MN X P Anoka Technical College Brainerd MN A X P Century College White Bear Lake MN A A R Dakota County Technical College Rosemount MN A<	Northern Michigan University	Marquette	MI								Χ
Oakland Community College Southfield Southfield MI X R S Schoolcraft College Garden City MI X ————————————————————————————————————	Northwestern Michigan College	Traverse City	MI	Α							
Schoolcraft College Garden City MI X Southwestern Michigan College Dowagiac MI X Southwestern Michigan College Dowagiac MI X Southwestern Michigan College Dowagiac MI X Southwestern Michigan College Detroit MI H Southwestern Michigan MI H Southwestern Michigan MI H Southwestity of Michigan MI H Southwestity of Michigan Flint Flint MI Southwestity Office MI A Southwestern MI MI A Southwestern MI MI A MI	Oakland Community College	Waterford	MI	Н			Χ				Х
Southwestern Michigan College Dowagiac MI X	Oakland Community College Southfield	Southfield	MI							RS	
University of Detroit Mercy University of Michigan Ann Arbor MI University of Michigan Ann Arbor MI University of Michigan Flint Flint MI Washtenaw Community College Ann Arbor MI A Wayne County Com College District Detroit MI A A B Century College Ann Arbor MI A A B Community College Ann Arbor MI A A B A B A B A B A B A B A B A B A B	Schoolcraft College	Garden City	MI								
University of Michigan Ann Arbor University of Michigan Flint Flint Flint MI Washtenaw Community College Ann Arbor MI MI A Wayne County Com College District Detroit MI A H Wayne State University Detroit MI Anoka Ramsey Community College Coon Rapids Anoka MN Anoka Technical College Brainerd MN Century College White Bear Lake MN A MN A MN A MN A MN A Brainerd MN A Controllege White Bear Lake MN A MN A MN A Brainerd Brainer	Southwestern Michigan College	Dowagiac	MI			Χ					
University of Michigan Flint Washtenaw Community College Ann Arbor MI A Wayne County Com College District Wayne State University Detroit MI Anoka Ramsey Community College Anoka Anoka T Contral Lakes College Brainerd Century College White Bear Lake Dunwoody College of Technology MI Anoka MI A A B A A A A A A A A A A A A A A A A	University of Detroit Mercy	Detroit	MI	Ι							
Washtenaw Community CollegeAnn ArborMIAXXPRWayne County Com College DistrictDetroitMIA HXOOWayne State UniversityDetroitMIR TSchoolCityStateDEMPHIMNPTRTRAnoka Ramsey Community CollegeCoon RapidsMNXPAAnoka Technical CollegeAnokaMNXOACentral Lakes CollegeBrainerdMNAAACentury CollegeWhite Bear LakeMNA HXRDakota County Technical CollegeRosemountMNARDunwoody College of TechnologyMinneapolisMNR	University of Michigan	Ann Arbor	MI	Ι							
Wayne County Com College District Wayne State University Detroit MI A H R T School City State D EMP HIM N P T RT R Anoka Ramsey Community College Coon Rapids MN Anoka Technical College Anoka Central Lakes College Brainerd MN A H Century College White Bear Lake MN A H Dakota County Technical College Rosemount MN MN A R Dunwoody College of Technology Minneapolis MI A H A H A H A H A H A H A H A	University of Michigan Flint	Flint	MI							Т	
Wayne State University Detroit MI School City State D EMP HIM N P T RT R Anoka Ramsey Community College Coon Rapids Anoka Technical College Anoka MN X P Central Lakes College Brainerd MN A Century College White Bear Lake MN A Dakota County Technical College Rosemount MN A MN A R Dunwoody College of Technology Minneapolis MN R R R R R R R R R R R R R	Washtenaw Community College	Ann Arbor	MI	Α			Χ		Р	R	
SchoolCityStateDEMPHIMNPTRTRAnoka Ramsey Community CollegeCoon RapidsMNXPAnoka Technical CollegeAnokaMNXOCentral Lakes CollegeBrainerdMNAOCentury CollegeWhite Bear LakeMNA HXRDakota County Technical CollegeRosemountMNARDunwoody College of TechnologyMinneapolisMNR	Wayne County Com College District	Detroit	MI	АН				Χ	0		
Anoka Ramsey Community College Coon Rapids MN X P Anoka Technical College Anoka MN X O Central Lakes College Brainerd MN A Century College White Bear Lake MN A H X R Dakota County Technical College Rosemount MN A Dunwoody College of Technology Minneapolis MN R	Wayne State University	Detroit	MI							R T	
Anoka Technical College Anoka MN X O Central Lakes College Brainerd MN A Century College White Bear Lake MN A H X Dakota County Technical College Rosemount MN A Dunwoody College of Technology Minneapolis MN R	School	City	State	D	EMP	HIM	N	Р	T	RT	R
Central Lakes College Brainerd MN A Image: Century College Century College White Bear Lake MN A H X R Dakota County Technical College Rosemount MN A Image: Century College Century Century College Century Century Century College Century Centur	Anoka Ramsey Community College	Coon Rapids					Χ		Р		
Century College White Bear Lake MN A H X R Dakota County Technical College Rosemount MN A Image: Control of the co	Anoka Technical College	Anoka	MN			Χ			0		
Dakota County Technical College Rosemount MN A Image: Control of the con	Central Lakes College	Brainerd	MN	Α							
Dunwoody College of Technology Minneapolis MN R	Century College	White Bear Lake	MN	АН	Χ					R	
	Dakota County Technical College	Rosemount	MN	Α							
	Dunwoody College of Technology	Minneapolis	MN							R	
	Hennepin Technical College	Eden Prarie	MN	Α							
Herzing University Crystal MN A H	Herzing University	Crystal	MN	АН							
Hibbing Community College Hibbing MN A X	Hibbing Community College	Hibbing	MN	Α				X			

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine S = Sonography (Diagnostic Medical) T = Therapy (Radiation) R = Respiratory

ene (Dental) P = Physical (Therapy) N = Nuclear Medicine T = Physical (Therapy)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Inver Hills Com Col & Century College	Inver Grove	MN		Х		Х				
Lake Superior College	Duluth	MN	Н					Р	R	Х
Minneapolis Com & Technical College	Minneapolis	MN	Α			Х				
MN State Com & Tech Col Detroit Lakes	Detroit Lakes	MN							R	
MN State Comm & Tech Col Moorhead	Moorhead	MN	АН				Х			
Minnesota State University Mankato	Mankato	MN	Н							
Minnesota West Com & Technical College	Worthington	MN	Α			Χ			R	
Normdale Community College	Bloomington	MN	Н			Χ				
Anoka Ramsey Community College	Coon Rapids	MN				Х		Р		
North Hennepin Community College	Brooklyn Park	MN				Χ				
Northland Com & Technical College	Thief River Falls	MN		Х		Χ	Х	O P	R	Х
Northwest Technical College	Bemidji	MN	Α							
Ridgewater College	Willmar	MN		Х	Χ	Χ				
Riverland Community College	Austin	MN				Χ	Х		R	
Rochester Com & Technical College	Rochester	MN	АН	Х		Х				
Saint Paul College	Saint Paul	MN			Χ					Х
South Central Technical College	North Mankato	MN	Α	Х						
St. Catherine University Minneapolis	Minneapolis	MN						O P	R	
St. Catherine University St. Paul	St. Paul	MN			Χ	Χ			S	Х
St. Cloud Technical & Community College	Saint Cloud	MN	АН	Х	Χ				S	
St. Mary's University	Winona	MN							N	
University of Minnesota	Minneapolis	MN	Н							
University of Minnesota Fairview	Edina	MN							R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Avila University	Kansas City	MO							R	
Cox College	Springfield	MO				Χ				
Hannibal LaGrange College	Hannibal	MO				Χ				Χ
Lincoln University	Jefferson City	MO				Χ				
Linn State Technical College	Jefferson City	MO						0		
Metropolitan Com College (Penn Valley)	Kansas City	MO	Α		Χ	Χ		O P	R	
Mineral Area College	Park Hills	MO							R	
Missouri Southern State University Joplin	Joplin	MO	Η			Χ			R	Χ
Missouri State University West Plains	West Plains	MO				Χ				
Missouri Western State University	St. Joseph	MO			Χ			Р		
North Central Missouri College	Trenton	MO	Н							

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

Ozarks Technical Community College Park University Saint Charles Community College	Springfield	MO								
	D. 1 111.	110	АН		Χ			O P		Χ
Saint Charles Community College	Parkville	MO				Х				
Janic Charles Community Conlege	St. Peters	MO			Χ	Χ		0		
Southeast Missouri HospCol of N & HS	Cape Girardeau	MO				Χ			R	
Southwest Baptist University	Springfield	MO				Χ				
St. Louis Community College	St. Louis	MO	АН			Χ		O P	RS	Χ
St. Louis University	St. Louis	MO							ΝT	
State Fair Community College	Sedalia	MO	Н						R	
Three Rivers Community College	Poplar Bluff	MO				Χ				
Webster University	St. Louis	MO				Х				
University of Missouri Columbia	Columbia	MO							RNS	Χ
U of Missouri City School of Dentistry	Kansas City	MO	Н							
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bryan LGH College of Health Sciences	Lincoln	NE				Χ			S	
Central Community College	Grand Island	NE	АН			Х				
Clarkson College	Omaha	NE				Χ		Р	R	
College of Saint Mary	Omaha	NE				Χ				
Creighton University	Omaha	NE		Х						
Metropolitan Community College	Omaha	NE	Α			Χ				Χ
Mid-Plains Community College Area	North Platte	NE	Α			Χ				
Nebraska Methodist College	Omaha	NE						Р	S	Χ
Nebraska Wesleyan University	Lincoln	NE				Χ				
Northeast Community College	Norfolk	NE				Χ		Р		
Southeast Community College	Lincoln	NE	Α			Χ	Χ		R	Χ
University of Nebraska Medical Center	Omaha	NE							RNST	
U of Nebraska Med Cntr Col of Dent	Lincoln	NE	Η							
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Central New Mexico Community College	Albuquerque	NM	Α	Χ	Χ	Χ	Χ		S	Χ
Clovis Community College	Clovis	NM				Χ			R	
Eastern New Mexico University	Portales	NM	Н	Х		Χ				
Eastern New Mexico University Roswell	Roswell	NM						0		Χ
New Mexico Junior College	Hobbs	NM				Χ				
New Mexico State University Alamgordo	Alamogordo	NM				Х				
New Mexico State University Carlsbad	Carlsbad	NM				Χ				
Northern New Mexico College	Espanola	NM							R	

O = Occupational (Therapy)
P = Physical (Therapy)

al (Therapy) N = Nuc

RT = Radiography S = Sonography (Diagnostic Medical)
N = Nuclear Medicine T = Therapy (Radiation)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
San Juan College	Farmington	NM	Н			Х		Р		Χ
Sante Fe Community College	Santa Fe	NM	Α	Х		Х				Χ
University of New Mexico Gallup	Gallup	NM	Α		Х					
University of New Mexico (Hlth Sci Cntr)	Albuquerque	NM	Н	Х						
Western New Mexico University	Silver City	NM				Х		0		
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bismark State College	Bismark	ND		Х						
Dickinson State University	Dickinson	ND				Х				
Jamestown College	Jamestown	ND				Х				
Minot State University	Minot	ND				Х				
Mountain Community College (Turtle)	Belcourt	ND					Х			
North Dakota State College of Science	Wahpeton	ND	АН				Х	0		
North Dakota State University	Fargo	ND								Χ
University of Mary	Bismark	ND								Χ
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Aultman College of Nursing & Hlth Sci	Canton	OH				Χ				
Bowling Green State University Firelands	Huron	ОН			Χ					Χ
Case Western Reserve University	Cleveland	ОН				Χ				
Central Ohio Technical College	Newark	OH				Χ			R S	
Cincinnati State Tech & Com College	Cincinnati	OH			Χ	Χ		0	S	Χ
Clark State Community College	Springfield	OH				Χ		Р		
Columbus State Community College	Columbus	OH	Ι	Χ	Χ	Χ			R	Χ
Cuyahoga Community College	Cleveland	OH	Ι		Χ	Χ	X	ΟP	RNS	Χ
Eastern Gateway Community College	Stuebenville	OH	Α						R	Χ
Edison Community College	Piqua	OH				X				
Franciscan University of Steubenville	Stuebenville	OH				Χ				
Good Samaritan Col of Nurs & Hlth Sci	Cincinnati	OH				Χ				
Hocking Technical College	Nelsonville	OH			Χ	Χ		Р		
James A. Rhodes State College	Lima	OH	Η			Χ		ΟP	R	Χ
Kent State University	Twinsburg	OH				X				
Kent State University Ashtabula	Ashtabula	OH						O P		Χ
Kent State University East Liverpool	East Liverpool	OH						O P		
Kent State University Salem	Salem	OH							RNT	
Kettering College of Medical Arts	Kettering	OH				Х			RS	Χ
Lakeland Community College	Kirtland	OH	Н		X	Χ			R	X

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Lorain County Community College	Elyria	OH	Н			Х		Р	RS	Х
Marion Technical College	Marion	OH				Χ		Р	R	
Mercy College of Northwest Ohio	Toledo	OH			Χ	Χ			R	
Miami University	Hamilton	OH				Х				
North Central State College	Mansfield	OH				Χ		Р	R	Χ
Northwest State Community College	Archbold	OH				Χ				
(The) Ohio State University	Columbus	OH							Т	Х
Ohio State University College of Dentistry	Columbus	OH	Н							
Ohio University	Athens	OH				Χ				
Otterbein College	Westerville	OH				Χ				
Owens Community College	Toledo	OH	Н		Χ			O P	RS	
Shawnee State University	Portsmouth	OH	Н			Х		O P	R	Х
Sinclair Community College	Dayton	OH	Н			Х		O P	R	Х
Southern State Community College	Hillsboro	OH				Χ				
Southern State Com College Fayette	Wash'ton Ct House	OH								Χ
Stark State College of Technology	Canton	OH	Н		Χ	Х		O P		Х
Terra Community College	Fremont	OH			Χ					
University of Akron	Akron	OH								Χ
University of Cincinnati Clermont College	Batavia	ОН						Р		
University of Cincinnati Raymond Walters	Cincinnati	OH	Н	Χ		Χ			RNT	
University of Findlay	Findlay	OH							N	
University of Rio Grande	Rio Grande	OH				Χ			Rs	Χ
University of Toledo	Toledo	ОН				Χ				Χ
Walsh University	North Canton	ОН				Χ				
Washington State Community College	Marietta	OH						Р		Χ
Xavier University	Cincinnati	OH							R	
Youngstown State University	Youngstown	ОН	Н	Χ		Χ				Χ
Zane State College	Zanesville	ОН			Χ			O P	R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bacone College	Muskogee	OK				Χ			R	
Carl Albert State College	Poteau	OK				Χ		Р	R	
Conners State College	Muskogee	OK				Χ				
East Central University	Ada	OK				Χ				
Eastern Oklahoma State College	Wilburton	OK				Χ				
Langston University	Langston	OK			Sonography	Χ				

O = Occupational (Therapy)
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RT = Radiography N = Nuclear Medicine S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Northwestern Oklahoma State University	Alva	OK				Х				
Oklahoma Baptist University	Shawnee	OK				Χ				
Oklahoma City Community College	Oklahoma City	OK		Х		Χ		O P		
Murray State College	Tishomingo	OK				Χ		O P		
Northeastern Oklahoma A&M College	Miami	OK				Χ		Р		
Northeastern State University	Muskogee	OK				Χ				
Northern Oklahoma College	Tonkawa	OK				Χ				
Oklahoma City University	Oklahoma City	OK				Χ				
Oklahoma Panhandle State University	Goodwell	OK				Χ				
Oklahoma State U Inst of Tech Okmulgee	Okmulgee	OK				Χ				
Oklahoma State U Oklahoma City	Oklahoma City	OK				Χ			S	
Redlands Community College	El Reno	OK				Χ				
Rogers State University	Claremore	OK				Χ				
Rose State College	Midwest City	OK	ΑН		Χ	Χ			R	Χ
Seminole State College	Seminole	OK				Χ				
Southwestern Oklahoma State University	Weatherford	OK				Χ		O P		
Southwestern Oklahoma State U Sayre	Sayre	OK							R	
Tulsa Community College	Tulsa	OK	Ι		Χ	Χ		O P	R	Χ
University of Central Oklahoma	Edmond	OK				Χ				
University of Oklahoma	Oklahoma City	OK	Ι			Χ			RNST	
University of Tulsa	Tulsa	OK				Χ				
Western Oklahoma State College	Altus	OK				Χ			R	
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Dakota State University	Madison	SD								X
Dakota Wesleyan University	Mitchell	SD				Χ				
Lake Area Technical Institute	Watertown	SD	Α					O P		
Mitchell Technical Institute	Mitchell	SD							R	
National American University	Rapid City	SD					X			
Presentation College	Aberdeen	SD				Χ			R	
Southeast Technical Institute	Souix Falls	SD					X		NS	
University of South Dakota	Vermillion	SD	Н			Χ				
Western Dakota Technical Institute	Rapid City	SD					X			
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Alderson Broaddus College	Philippi	WV				X				
Blue Ridge Com & Technical College	Martinsburg	WV				X				
Bluefield State College	Bluefield	WV			2	Χ	L	<u> </u>	R	

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bridgemont Com & Technical College	Montgomery	WV	Н							
Davis & Elkins College	Elkins	WV				Х				
Fairmont State University	Fairmont	WV				Χ				
Marshall University (St. Mary's Hosp RN)	Huntington	WV				Χ				Χ
Mountain State University	Beckley	WV				Χ		O P	R S	
Mountwest Com & Technical College	Huntington	WV						Р		
Pierpont Com College	Fairmont	WV			Χ			Р		Χ
Shepard University	Shepardstown	WV				Χ				
Southern West Virginia Com & Tech Col	Mount Gay	WV	Η			Χ			R	Χ
University of Charleston	Charleston	WV				Χ			R	
West Liberty University	West Liberty	WV	Н							
West Virginia Northern Com College	Wheeling	WV			Χ	Χ				Χ
West Virginia University at Parkersburg	Parkersburg	WV				Χ				
West Virginia Weselyan College	Buckhannon	WV				Χ				
Wheeling Jesuit University	Wheeling	WV							N	Χ
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Blackhawk Technical College	Janesville	WI	Α			Χ		Р	R S	
Cardinal Stritch University	Milwaukee	WI				Χ				
Chippewa Valley Technical College	Eau Claire	WI	Н		Χ	Χ		Р	R S	Χ
College of Menominee Nation	Keshena	WI				Χ				
Columbia College of Nursing	Milwaukee	WI				Χ				
Fox Valley Technical College	Appleton	WI	ΑН			Χ		0		
Gateway Technical College	Kenosha	WI			Χ	Χ		Р		
Herzing University Madison	Madison	WI				Χ				
Lakeshore Technical College	Cleveland	WI				Χ			R	
Madison Area Technical College	Madison	WI	Η			Χ		0	R	Χ
Mid-State Technical College	Wisconsin Rapids	WI			Χ	Χ				Χ
Milwaukee Area Technical College	Milwaukee	WI	Н			Χ	Χ	O P	R	Χ
Moraine Park Technical College	West Bend	WI				Χ			R	Χ
Nicolet Area Technical College	Rhinelander	WI				Χ				
Northcentral Technical College	Wausau	WI	Н			Χ			R	
Northeast Wisconsin Technical College	Green Bay	WI	ΑН		Χ	Χ		Р	R S	Χ
Southwest Wisconsin Technical College	Fennimore	WI				Χ				
University of Wisconsin LaCrosse	La Crosse	WI							T	
Waukesha County Technical College	Pewaukee	WI	Η	Χ	Χ	Χ				
Western Wisconsin Technical College	La Crosse	WI	АН		Χ	Χ		ΟP	R	Χ
Wisconsin Indianhead Technical College		WI				Х				

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
University of Wisconsin LaCrosse	La Crosse	WI							Т	
Waukesha County Technical College	Pewaukee	WI	Н	Χ	Χ	Χ				
Western Wisconsin Technical College	La Crosse	WI	ΑН		Χ	Χ		O P	R	Χ
Wisconsin Indianhead Technical College	Shell Lake	WI				Χ		0		
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Casper College	Casper	WY				Χ	Х	0	R	Χ
Central Wyoming College	Riverton	WY				Χ				
Laramie County Community College	Cheyenne	WY	Н	Χ		Χ		Р	RS	
Northern Wyoming Com College District	Gillette	WY				Χ				
Northwest College	Powell	WY				Χ				
Sheridan College	Sheridan	WY	Н							
Western Wyoming Community College	Rock Springs	WY				Χ				

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Northwest Accreditation Commission

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
University of Alaska-Anchorage	Anchorage	AK	АН			Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Boise State University	Boise	ID			Х	Х			RS	Х
Brigham Young University Idaho	Rexburg	ID		Х		Χ				
College of Southern Idaho	Twin Falls	ID	Н	Х		Χ			R	
College of Western Idaho	Boise	ID	Α							
Idaho State University	Pocatello	ID	Н	Χ		Χ		Р		Χ
North Idaho College	Coeur d'Alene	ID				Χ			R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Montana State University Billings	Billngs	MT		Х						
Montana State University Great Falls	Great Falls	MT	АН					Р		Х
Montana State University Northern	Havre	MT				Χ				
Montana Tech of the U of Montana	Butte	MT				Χ				
Salish Kootenai College	Pablo	MT	Α			Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
College of Southern Nevada	Las Vegas	NV	АН	Х	Х	Х	Х	O P	ST	Х
Great Basin College	Elko	NV				Χ				
Truckee Meadows Community College	Reno	NV	ΑН			Χ				
University of Nevada	Las Vegas	NV				Χ			RN	
University of Southern Nevada	Henderson	NV				Χ				
Western Nevada College	Carson City	NV				Χ				
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Blue Mountain Community College	Pendleton	OR	Α							
Central Oregon Community College	Bend	OR	Α		Χ					
Chemeketa Community College	Salem	OR	Α	Χ		Χ	Χ			
Lane Community College	Eugene	OR	АН							Χ
Linn Benton Community College	Albany	OR	Α							
Mt. Hood Community College	Gresham	OR	Н					Р		Χ
Oregon Health Sciences University	Sherwood	OR		Χ					T	
Oregon Institute of Technology	Klamath Falls	OR	Н							Χ
Pacific University	Hillsboro	OR	Н							
Portland Community College	Portland	OR	ΑН			Χ			R	
Umpqua Community College	Roseburg	OR				Χ				
Walla Walla University	Portland	OR PT = Padiogram			Sonograph	Χ				

A = Assisting (Dental) H = Hygiene (Dental)

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R = Respiratory

School	City	State	D	EMP	HIM	N	Р	Т	RT	R
College of Eastern Utah	Price	UT				Χ				
Dixie State College of Utah	St. George	UT	Н	Х		Χ			R	Χ
Salt Lake Community College	West Jordan	UT	Н			Χ		O P	R	
University of Utah	Salt Lake City	UT		Х					N	
Utah Valley University	Orem	UT		Х		Χ				
Weber State University	Ogen	UT	Н	Х		Χ				Χ
Weber State University Davis	Layton	UT								Х
Weber State University IHC	Salt Lake City	UT								Χ
Weber State University Utah Valley	Provo	UT								Х
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Bates Technical College	Tacoma	WA	Α							
Bellevue College	Bellevue	WA				Χ			NST	
Bellingham Technical College	Bellingham	WA	АН	Х						
Big Bend Community College	Moses Lake	WA				Χ				
Central Washington University	Ellensburg	WA		Х						
Clark College	Vancouver	WA	Н			Χ				
Clover Park Technical College	Lakewood	WA	Α				Χ			
Columbia Basin College	Pasco	WA	Н	Х		Χ				
Eastern Washington University	Spokane	WA	Н							
Everett Community College	Everett	WA				Χ				
Grays Harbor College	Aberdeen	WA				Χ				
Greenriver Community College	Auburn	WA						O P		
Highline Community College	Des Moines	WA				Χ				Χ
Lake Washington Technical College	Kirkland	WA	АН					Р		
Lower Columbia College	Longview	WA				Χ				
North Seattle Community College	Seattle	WA				Χ				
Olympic College	Bremerton	WA				Χ		Р		
Pennisula College	Port Angeles	WA				Χ				
Pierce College	Lakewood	WA	Η							
Pierce College Puyallup	Puyallup	WA				Χ				
Renton Technical College	Renton	WA	Α				X			
Seattle Central Community College	Seattle	WA	Η			Χ				Χ
Seattle Vocational Institute	Seattle	WA	Α							
Seattle University	Seattle	WA							S	
Shoreline Community College	Seattle	WA	Н			Χ				
Skagit Valley College	Mount Vernon	WA				Χ				

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
South Puget Sound Community College	Olympia	WA	Α			Χ				
Spokane Community College	Spokane	WA	Α	Χ	Χ		Χ		RS	Χ
Spokane Falls Community College	Spokane	WA						Р		
Tacoma Community College	Tacoma	WA		Χ		Χ			RS	Χ
University of Washington	Seattle	WA		Χ						
Walla Walla Community College	Walla Walla	WA				Х				
Wenatchee Valley College	Wentachee	WA				Χ				
Whatcom Community College	Bellingham	WA				Х		Р		
Yakima Valley Community College	Yakima	WA	Н			Χ				

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Western Association of Schools and Colleges

School	City	State	D	EMP	HIM	N	Р	T	RT	R
American River College	Sacramento	CA								Х
Antelope Valley College	Lancaster	CA							R	Х
Bakersfield College	Bakersfield	CA							R	
Butte Community College	Oroville	CA		Х						Х
California State University-Hayward	Hayward	CA				Х				
California State University-Long Beach	Long Beach	CA							Т	
California State University-Northridge	Northridge	CA							R	
Canada College	Redwood City	CA							R	
Carrington College (Western Career)	Sacramento	CA	Н							
Carrington College Antioch	Antioch	CA					Χ			
Carrington College Citrus Heights	Citrus Heights	CA					Χ			
Carrington College Emeryville	Emeryville	CA					Х			
Carrington College Pleasant Hill	Pleasant Hill	CA					Χ			Χ
Carrington College San Jose	San Jose	CA	Н				Χ			
Carrington College San Leandro	San Leandro	CA					Χ			
Carrington College Stockton	Stockton	CA					Χ			
Cerritos Community College	Norwalk	CA	АН			Χ	Χ	Р		
Chabot College	Hayward	CA	Н							
Chaffey College	Rancho Cucamonga	CA	Α			Х			R	
Charles R. Drew U of Med & Science	Los Angeles	CA			Χ		Х		RS	
Citrus College	Glendora	CA	Α							
City College of San Francisco	San Francisco	CA	Α	X	Χ				RT	
College of Alameda	Alameda	CA	Α							
College of Marin	Kentfield	CA	Α			Χ				
College of San Mateo	San Mateo	CA	Α							
College of the Canyons	Santa Clarita	CA				Х				
College of the Desert	Palm Desert	CA				Χ				
College of the Redwoods	Eureka	CA	Α							
Contra Costa College	San Pablo	CA	Α							
Cosumnes River College	Sacramento	CA			Χ					
Crafton Hills College	Yucaipa	CA		Χ						Χ
Cuestra College	San Luis Obispo	CA		Χ						
Cypress College	Cypress	CA	АН		Χ	Χ			RS	
Diablo Valley College	Pleasant Hill	CA	АН			(D:				

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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
East Los Angeles College	Monterey Park	CA			Х				R	Χ
El Camino Community College	Torrence	CA				Х			R	Χ
Foothill College	Los Altos Hills	CA	ΑН	Х			Х		RS	Χ
Fresno City College	Fresno	CA	Н	Х	Х				R	Χ
Golden West College	Huntington Beach	CA				Х				
Grossmont-Cuyamaca Com ColDistrict	El Cajon	CA				Х		0		Χ
Heald College Concord Campus	Concord	CA	Α							
Heald College Hayward Campus	Hayward	CA	Α							
Heald College Stockton Campus	Stockton	CA	Α							
Imperial Valley Community College	Imperial	CA		Х						
Loma Linda University	Loma Linda	CA	Н					0	RST	Χ
Los Angeles City College	Los Angeles	CA							R	
Los Angeles Harbor College	Wilmington	CA				Х				
Los Angeles Pierce College	Woodland Hills	CA				Х				
Los Angeles Valley College	Valley Glen	CA				Х				Χ
Mendocino Lake Com College District	Ukiah	CA		Х						
Merced College	Merced	CA							RS	
Merritt College	Oakland	CA							R	
Modesto Junior College	Modesto	CA	Α				Х			Χ
Monterey Peninsula College	Monterey	CA				Х				
Moorpark College	Moorpark	CA				Х			R	
Moreno Valley College	Moreno Valley	CA	АН							
Mt. San Antonio College	Walnut	CA		Х					R	Χ
Napa Valley College	Napa Valley	CA		Х						Χ
Ohlone College	Newark	CA				Х		Р		Χ
Orange Coast College	Costa Mesa	CA	Α						RS	Χ
Oxnard College	Oxnard	CA	Н							
Pacific Union College	Angwin	CA				Х				
Palomar College	San Marcos	CA	Α	Х		Х				
Pasadena City College	Pasadena	CA	АН						R	
Platt College	Ontario	CA								Χ
Riverside Community College	Riverside	CA		Χ		Χ				
Sacramento City College	Sacramento	CA	АН					O P		
Saddleback College	Mission Viejo	CA		Х		Χ				
San Bernardino Valley College	San Bernardino	CA				Х				
San Diego City College	San Diego	CA				Х				
A = Assisting (Dental) O = Occupati	onal (Therany)	RT = Radiogra	aby.	9 _ 9	Sanagraph	v (Diagno	stic Medica	٦١)	D _ 0	Respiratory

O = Occupational (Therapy)
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School	City	State	D	EMP	HIM	N	Р	Т	RT	R
San Diego Mesa College	San Diego	CA	Α		Χ			Р	R	
San Joaquin Delta College	Stockton	CA				Χ				
San Joaquin Valley College Bakersfield	Bakersfield	CA								Χ
San Joaquin Valley Col R Cucamongo	Rancho Cucamonga	CA								Χ
San Joaquin Valley College Visalia	Visalia	CA	Н							Χ
San Jose City College	San Jose	CA	Α							
Santa Ana College	Santa Ana	CA				Χ	Χ	0		
Santa Barbara City College	Santa Barbara	CA				Χ			RS	
Santa Monica College	Santa Monica	CA				Χ				
Santa Rosa Junior College	Santa Rosa	CA	АН	Χ					R	
Shasta College	Redding	CA	Ι							
Skyline College	San Bruno	CA								Χ
Sonoma State University	Rohnert Park	CA				Χ				
Southwestern College	San Diego	CA	Ι	Χ		Χ				
Taft College	Taft	CA	Η							
University of Ca San Diego Med Cntr	San Diego	CA							S	
University of Southern California	Los Angeles	CA	Ι							
Ventura College	Ventura	CA		Χ						
Victor Valley College	Victorville	CA		Χ						Χ
West Los Angeles College	Culver City	CA	Ι							
Yuba Community College	Marysville	CA							R	
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Hawaii Community College	Hilo	HI				Χ				
Hawaii Pacific University	Kaneohe	HI				Χ				
Heald College Honolulu Campus	Honolulu	HI	Α		Χ					
Kapiolani Community College	Honolulu	HI				Χ		O P	R	Χ
University of Hawaii	Honolulu	HI	Н							
University of Hawaii at Hilo	Hilo	HI				Χ				
University of Hawaii Maui Com College	Kahului	HI	АН			Χ				
University of Hawaii Kauai Com College	Lihue	HI F = Padiogram			Conography	Χ				Pesnirator

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APPENDIX C SAMPLE DATABASE

NEASC										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Kennebec Valley Community College	Fairfield	ME			Х	Х		ΟP	RS	Х
Quinsigamond Community College	Worcester	MA	ΑН			Χ		0	R	Χ
Springfield Technical Community College	Springfield	MA	АН			Х		ΟP	RNS	Χ
MSA										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Allegany College of Maryland	Cumberland	MD	Η			Χ		O P	R	Χ
Anne Arundel Community College	Arnold	MD		Χ		Χ	Χ	Р	R	
Baltimore City Community College	Baltimore	MD	Η		Χ	Χ		Р		Χ
Community College of Baltimore County	Baltimore	MD	Н	X	Χ	Χ		0	R T	Χ
Broome Community College	Binghampton	NY	Η		Χ	Χ		Р	R	
Erie Community College SUNY	Williamsville	NY	Ι		Χ	Χ		0	Т	Χ
Hudson Valley Community College	Troy	NY	Η	X		Χ			S	Χ
Monroe Community College	Rochester	NY	АН	X	Х	Χ			R	
Community College of Allegheny County	Pittsburg	PA			Х	Χ	Χ	0	ΝT	Χ
Harrisburg Area Community College	Harrisburg	PA	АН	Χ		Χ			S	Χ
Pennsylvania College of Technology	Williamsport	PA	Η	X	Χ	Χ		0	R	
SACS										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Wallace State Community College	Hanceville	AL	АН	Χ		Χ		0	RS	Χ
Broward Community College	Coconut Creek	FL	ΑН	Χ	Χ	Χ		Р	S	Χ
College of Central Florida	Ocala	FL	Α	Χ	Χ	Χ		Р		
Edison State College	Fort Myers	FL	Η	Χ		Χ			R	Χ
Florida State College at Jacksonville	Jacksonville	FL	Ι	Χ	Χ	Χ		Р		Χ
Gulf Coast Community College	Panama City	FL	ΑН	Χ		Χ		Р	R	Χ
Indian River State College	Fort Pierce	FL	ΑН	Χ	Χ	Χ		Р	R	Χ
Miami Dade College	Miami	FL	Н	X	Х	Χ		Р	RS	Χ
Polk State College	Winter Haven	FL		Χ	Χ	Χ		O P	R	Χ
Saint Petersburg College	Pinellas	FL	Ι	Χ		Χ		Р	R	Χ
Valencia Community College	Orlando	FL	Η	Χ		Χ			RS	Χ
Athens Technical College	Athens	GA	ΑН			Χ		Р	R S	Χ
Georgia Northwestern Technical College	Rock Spring	GA	Α		Χ	Χ		0	RNST	Χ
Jefferson Community & Technical College	Louisville	KY			Χ	Χ	Χ	ΟP	RNS	Χ
West Kentucky Com & Technical College	Paducah	KY	Α			Χ		Р	R S	Χ

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SACS cont										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Delgado Community College	New Orleans	LA		Х	Χ	Х	Х	ОР	RNST	Χ
Hinds Community College	Jackson	MS	Α	Х	Χ	Χ		Р	RS	Χ
Itawamba Community College	Fulton	MS		Х	Χ	Χ		O P	RS	Χ
Meridian Community College	Meridian	MS	АН			Χ		Р	R	Χ
Pearl River Community College	Poplarville	MS	АН			Χ		O P	R	Χ
Cape Fear Community College	Wilmington	NC	АН			Χ	Х	0	RS	
Catawba Valley Community College	Hickory	NC	Н	Х	Χ	Χ			R	Χ
Fayetteville Technical Community College	Fayetteville	NC	АН			Χ		Р	R	Χ
Florence Darlington Technical College	Florence	SC	АН		Х	Х			R	Χ
Greenville Technical College	Greenville	SC	АН	Х		Х	Х	ΟP	RS	Х
Horry Georgetown Technical College	Myrtle Beach	SC	АН	X		Х	Х	Р	RS	
Midlands Technical College	Columbia	SC	АН		Х	Х	Х	Р	RN	Х
Spartanburg Community College	Spartanburg	SC	Α			Х	Х		R	Χ
Trident Technical College	Charleston	SC	АН	Х		Х	Х	ΟP	R	Χ
Jackson State Community College	Jackson	TN		Х		Χ		Р	R	Χ
Roane State Community College	Harriman	TN	Н	Х		Χ	Х	O P	R	Χ
Volunteer State Community College	Gallatin	TN	Α	Х	Х			Р	RS	Χ
Amarillo College	Amarillo	TX	Н			Χ	Χ	O P	RNT	Χ
Austin Community College	Austin	TX	Н	Х		Χ	Х	O P	RS	
Del Mar College	Corpus Christi	TX	АН		Χ	Х	Х	O P	RNS	Χ
El Paso Community College	El Paso	TX	АН		Χ	Χ	Х	Р	RS	Χ
Howard College	Big Spring	TX	Н		Χ	Χ			R	Χ
McLennan Community College	Waco	TX			Χ	Χ		Р	R	Χ
Tarrant County College	Fort Worth	TX	Н	X	Χ	Χ		Р	R	Χ
Wharton County Junior College	Wharton	TX	Н	X	Χ			Р	R	
Northern Virginia Community College	Springfield	VA	Н	X	Χ	Χ		Р		Χ
Tidewater Community College	Portsmouth	VA		Х	Χ	Χ		O P	RS	Χ
NCA										
School	City	State	D	EMP	HIM	N	Р	T	RT	R
Pima County Community College	Tucson	AZ	АН			X	X		R	Χ
NP Community College at Hot Springs	Hot Springs	AR		X	Χ	X			R	Χ
Pueblo Community College	Pueblo	CO	АН	X		Χ		ΟP		Χ
College of DuPage	Glen Ellyn	IL	Н		Χ			Р	RNS	Χ
Illinois Central College	Peoria	IL RT = Radiogram	Н		Sonograph	Χ		ΟP	R	X Resnirators

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine S = Sonography (Diagnostic Medical) T = Therapy (Radiation)

NCA cont										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Kaskaskia College	Centralia	IL	Α			Х		Р	R	Х
Parkland College	Champaign	IL	Н			Х		0	R	Х
Southwestern Illinois College	Belleville	IL			Х	Х		Р	R	Х
Kirkwood Community College	Cedar Rapids	IA	АН	Х	Х			O P		Х
Delta College	University City	MI	АН			Х		Р	R S	Х
Ferris State University	Big Rapids	MI	Н		Х	Х			RNS	Х
Henry Ford Community College	Dearborn	MI				Χ	Х	Р	R S	Χ
Macomb Community College	Clinton Township	MI			Х	Х		O P	N	X
Washtenaw Community College	Ann Arbor	MI	Α			Χ	Х	Р	R	
Northland Com & Technical College	Thief River Falls	MN		Χ		Χ	X	O P	R	Χ
Metropolitan Com College (Penn Valley)	Kansas City	MO	Α		Χ	Χ		O P	R	
St. Louis Community College	St. Louis	MO	АН			Χ		O P	R S	Χ
Southeast Community College	Lincoln	NE	Α			Χ	X		R	Χ
Central New Mexico Community College	Albuquerque	NM	Α	Χ	Χ	Χ	Χ		S	Χ
Cincinnati State Tech & Com College	Cincinnati	OH			X	Χ		0	S	X
Cuyahoga Community College	Cleveland	OH	Н		Χ	Χ	Χ	O P	RNS	Χ
James A. Rhodes State College	Lima	OH	Н			Χ		O P	R	Χ
Lakeland Community College	Kirtland	OH	Н		X	X			R	X
Lorain County Community College	Elyria	OH	Н			Χ		Р	R S	Χ
Shawnee State University	Portsmouth	ОН	Н			Χ		O P	R	Χ
Sinclair Community College	Dayton	OH	Н			X		O P	R	X
Stark State College of Technology	Canton	OH	Н		X	X		O P		X
Rose State College	Midwest City	OK	АН		X	X			R	Χ
Tulsa Community College	Tulsa	OK	Н		X	X		O P	R	X
Chippewa Valley Technical College	Eau Claire	WI	Н		X	X		Р	R S	X
Madison Area Technical College	Madison	WI	Н			X		0	R	X
Milwaukee Area Technical College	Milwaukee	WI	Н			X	Χ	O P	R	Χ
Northeast Wisconsin Technical College	Green Bay	WI	АН		X	X		Р	RS	X
Western Wisconsin Technical College	La Crosse	WI	АН		Χ	X		O P	R	Χ
Casper College	Casper	WY				X	Χ	0	R	Χ
Laramie County Community College	Cheyenne	WY Dadiogram	Н	X	Concaronh	X		Р	RS	Doonirotor

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography N = Nuclear Medicine

S = Sonography (Diagnostic Medical)
T = Therapy (Radiation)

NWAC										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Idaho State University	Pocatello	ID	Н	Х		Х		Р		Х
College of Southern Nevada	Las Vegas	NV	АН	Х	Х	Х	Х	O P	ST	Х
Dixie State College of Utah	St. George	UT	Н	Х		Х			R	Х
Spokane Community College	Spokane	WA	Α	Х	Х		Х		RS	Χ
WASC										
School	City	State	D	EMP	HIM	N	Р	Т	RT	R
Foothill College	Los Altos Hills	CA	ΑН	Х			Х		RS	Х
Fresno City College	Fresno	CA	Н	Х	Х				R	Х

O = Occupational (Therapy)
P = Physical (Therapy)

RT = Radiography
N = Nuclear Medicine

S = Sonography (Diagnostic Medical)
T = Therapy (Radiation)

R = Respiratory

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APPENDIX D ORIGINAL ONLINE QUESTIONNAIRE

Instructions:

Thank you for taking the time to participate in the following survey. The information you provide will be of great assistance to me as I research effective indicators which may assist healthcare providers who transition into educational leadership roles and to investigate healthcare educators' perceptions of successful healthcare educators. This, in turn, will assist all of us in facilitating this transition, identifying effective methods of developing new faculty, and hopefully retaining quality healthcare educators. This could ultimately affect the preparedness of our future graduates. If you agree to participate, you will be among a sampling of healthcare educators who are currently employed in an allied health discipline in a regionally accredited college or university setting. Your responses will be completely confidential. Individual responses will not be identified in any way. The survey should take no longer than 10-15 minutes of your time.

If you have any questions concerning this project, please feel free to contact Dr. Vicki N. Petzko at the University of Tennessee at Chattanooga School of Education at 423.425.4542 or vicki-petzko@utc.edu. This project has been approved by the Institutional Review Board at the University of Tennessee at Chattanooga. Questions regarding Institutional Review Board approval may directed to Dr. Bart Weathington at 423.425.4443.

Thank you, again, for your willingness to participate!

Lisa Legg, MAEd, RT(R)(T)
Radiation Therapy Technology, Program Director
Chattanooga State Community College
Learning and Leadership Doctoral Student
The University of Tennessee at Chattanooga
lisa-legg@.utc.edu
423.697.3336

Please choose the appropriate answer for the following questions:

1.	Gender
[]	male
[]	female
2.	Age
[]	25 or below
[]	26-35
[]	36-45
[]	46-55
[]	56 or over
3.	Highest Level of Education
[]	Professional Certification
Π	Associate's Degree

[]	Bachelor's Degree
	Master's Degree
[]	Doctorate
[]	Other
4.	Years of Experience in Healthcare Education (This only includes time
em	ployed as a college or university faculty member—do not count the current
yea	·
	0-5
	6-10
	11-15
	16-20
	21-25
	26- or more
	Employment Status
	Full-time
	Part-time (teach multiple courses and receive benefits)
	Adjunct Faculty (teach limited courses and receive no benefits)
	Tenure Status
	Fully tenured Working toward tenure
	Tenure is not offered at my institution/position
	Academic Program
	Dental (Assisting, Hygeine)
	Emergency Medicine (Technician, Paramedic)
	Health Information Management
	Nursing
	Pharmacy Technology
	Physical Therapy
	Radiologic Technology (CT, DMS, MRI, NM, RTT)
	Respiratory Care
Ö	Other
8.	Programmatic Accreditation: Does your program participate in
spe	ecialty/programmatic accreditation?
	yes Organization:
	no
	Location of Your College or University
	w England
	Connecticut
	Maine
	Massachusetts
	New Hampshire
	Rhode Island
	Vermont
	d-Atlanta
IJ	New Jersey

I	[] New York
	[] Pennsylvania
E	ast North Central
	[] Indiana
Ī] Illinois
i	[] Michigan
	 [] Ohio
] Wisconsin
W	lest North Central
	[] lowa
	[] Kansas
	[] Minnesota
	[] Missouri
	[] Nebraska
Ī	North Dakota
Ī	South Dakota
	outh Atlantic
] Delaware
Ī	District of Columbia
	 [] Florida
	[] Georgia
] Maryland
] North Carolina
	South Carolina
] Virginia
_] West Virginia
_	outh
ı	[] Alabama
_] Arkansas
] Kentucky
] Lousiana
] Mississippi
] Oklahoma
	Tennessee
] Texas
	lountain
ı	[] Arizona
	Colorado
] Idaho
] Montana
	New Mexico
	[] Nevada
i	[] Utah
	[] Wyoming

Pacific [] Alaska [] California [] Hawaii [] Oregon [] Washington For the following, identify how influential each factor was in your decision to transition from the clinical setting into the academic setting: SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree Α SA SD 10. appeal of academic benefits (schedule/holidays) 11 devotion to your profession and desire to promote it 12. satisfaction received by teaching 13. opportunity to further education (obtaining advanced dearee) 14. desire to change careers 15. Was there some other factor, not listed above, which influenced your decision to transition from the clinical setting into the academic setting? When transitioning into your current position as a healthcare educator, which of the following factors did you find conducive in your preparation? SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree SA Α Ν SD 15. your previous theoretical educational training 16. your previous educational experiences (modeling previous instructors) 17. your previous clinical work experiences 18. assistance from colleagues / supervisor / dean 19. professional development activities 20. mentoring activities 21. pursuing an advanced degree

- 22. Was there some other factor, not listed above, which you found conducive in your preparation?
- 23. What unique (training) opportunities were provided to you at the time of initial hiring?
- 24. What opportunities do you WISH had been provided to you?

25. Had you had any previous educational (theory) training?

When transitioning into your current position as a healthcare educator, which of the following factors did you find least conducive in your preparation?

SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree
SA A N D SD

26. lack of background in educational

theory/practice

- 27. lack of instructional delivery skills/experience
- 28. lack of class room management

skills/experience

- 29. lack of instructional assessment experience
- 30. having little or no self confidence
- 31. lack of administrative support
- 32. lack of colleague support
- 33. struggling with institution's operational policies
- 34. overwhelming workload
 - 35. Was there some other factor, not listed above, which you found least conducive in your preparation?
 - 36. What experience(s)/activities were you most unprepared for as a new healthcare educator?

For the following, indicate how influential each factor is in your decision to remain in education long-term?

SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree
SA A N D SD

37. the appeal of academic benefits

(schedule/holidays)

38. devotion to your profession and desire to promote it

- 39. satisfaction received by teaching
- 40. academic freedom/independence
- 41. desire for continued growth and development within

the profession

42. Was there some other factor, not listed above, which would be influential in your decision to remain in education long-term?

43. In your opinion, what demonstrated behaviors cause one to be an
effective healthcare educator? (Choose all that apply)
[] sensitive/responsive to student needs
[] excellent communication skills
[] adaptable
[] efficient classroom management skills
[] quality instructional methods
[] appropriate level of knowledge/skill
[] organized
[] professional
[] ethical
[] motivated
[] other

44. Concluding Question: Is there anything else that you would like to add or share about your pre-teaching experiences and/or your current teaching experiences?

Thank you for participating in this survey!

If you would like the results of the survey and a link to the dissertation, please send me an email at lisa-legg@.utc.edu. I will be happy to provide that information to you at the conclusion of the research.

APPENDIX E QUESTIONNAIRE PEER REVIEW EMAIL CORRESPONDENCE

From: Lisa Legg

Sent: Thursday, February 10, 2011 6:01 PM

To:Varnell;Castleberry;Roberts;McMillan;Swafford;Watts;Warren;Sanders;Hall;Yarbrough;Ross;Hancock

Cc: 'vicki-petzko@utc.edu'

Subject: Input to Lisa Legg's Dissertation Questionnaire—if you so please!

Hi all,

First—thank you for agreeing to assist me with a critical portion of my dissertation. My committee members (UTC faculty Dr. Vicki Petzko (chair), Dr. Hinsdale Bernard (methodologist), and Dr. David Rausch along with Dr. Tanya Gorman from DeKalb Tech in Atlanta) have provided and continue to provide me with unbelievable support and guidance. I know you all are incredibly busy; however, your valuable input will help me to further focus my survey questions and allow me to begin the data collection process.

In the attached document, I have provided some basic information about my dissertation: its purpose, the directing research questions, and a brief description of the population/sample. You will also find a copy of the questionnaire that will be emailed to selected healthcare program faculty across the nation. I ask that you review the questionnaire to ensure that it is consistent with the established research questions. As you review the survey consider the following:

- am I asking the right questions to answer the research questions,
- are the questions clear and concise,
- deletions and/or additions,
- and, of course grammatical corrections/suggestions.

You will note that the questionnaire was also designed to collect demographic information for statistical purposes.

Please let me know if you have any questions. I look forward to your feedback/input!

Kindly, Lisa

Lisa Legg, MAEd, RTI(T)
Chattanooga State Community College
Radiation Therapy Technology, Program Director
4501 Amnicola Highway CBIH-126
Chattanooga, TN 37406

Office: 423.697.3336 Fax: 423.697.3324

lisa.legg@chattanoogastate.edu

From:

Sent: Friday, February 11, 2011 8:27 AM

To: Lisa Legg

Subject: RE: Input to Lisa Legg's Dissertation Questionnaire—if you so please!

Hey Lisa, I added some comments/suggestions. Hope this helps. You certainly won't hurt my feelings if you don't use my suggestions. I know how frustrating it can be to get one of these documents finalized. Good luck with this. Let me know if you don't understand my comments.



From:

Sent: Sunday, February 13, 2011 2:52 PM

To: Lisa Legg

Subject: RE: Input to Lisa Legg's Dissertation Questionnaire--if you so please!

Wow, let me commend you on where you are in your process, Lisa. I know it has taken much time and great effort to be here - I'm so proud of you!!!!!

In knowing from my own experience how much time and energy it takes, in no way do I want to slow you down in your process; but I know you don't just want a rubber stamp approval either - that you need legitimate feedback to make your project of your high standard. Since I still have more classes to take and am well behind you, I don't pretend, by any stretch of the imagination to know the extent of information that you do - particuarly on your subject matter, of which you have developed great expertise.

Therefore, take or leave my comments, as they are or are not helpful to you, as I can only speak to you from my own experiences and through my own lens of knowledge.

- I started out taking your survey, so I could think through it as a respondent. I really liked the way your organized your demographic information for your ease in processing, particularly in relation to regions.
- When I arrived to the first Likert scale questions (10-14), the first question that popped into my mind was, "Why is salary not listed here, since benefits are? After all, haven't I heard, from the beginning of my tenure in my position, all of those within our Division speak of how they took salary cuts to come here, or how they could make more money in non-academic positions? And haven't we lost members of our faculty for that very reason (whether by the fact that they never came or they left us)?" To me, salary seems to hold great influence potentially.
- On the second set of scaled questions (15-16), the main thing that held me up was #19. I got stuck on trying to decide if I was answering "professional development activities" in the sense of professional development provided by the college /or/ continuing educational development provided at my specialized professional level (e.g., sonography). I find some types to be more beneficial than others and wondered if you could delineate that (or divide it into the two for healthcare educators). I also thought about #20 being differentiated between peer mentoring & supervisory mentoring.

- When I got to the third set of scaled questions (26-34), I had trouble on a couple of levels. First of all, I felt like they were difficult to answer (much like an "Exception" question is on a multiple choice test). When trying to answer if I Agreed that I found a lack of something "least conducive," I began to confuse myself in the answer. I can see the potential of many others of your respondents forgetting what they are answering too, thus possibly giving your research incorrect conclusions. At the very least, I might change the wording (maybe from "least conducive" to comething like "detrimental," which may be the wrong word it's just an example).
- My other (and maybe greater) concern with this grouping was that it held a bias in it that
 could lead the respondent. By dividing "conducive" with "least conducive" categories, you've
 already told me which you think it which (or it seems that way to a respondent). I might
 have the tendency to agree due to the halo effect.
- Have you considered grouping these two areas together without a "lacking" statement? Since you have strongly disagree as a response, could they not be in the same group, then all of your follow-up questions put together?
- Another consideration might be to re-categorize the groupings, with the same question & same scale, but similar traits:
 - o salary, benefits, things like that in one area
 - o educationally related items in another area
 - o experiences in another area
 - o personal characteristics in another area
- After question 36, you give the following explanation:
 - "For the following, indicate how influential each factor is in your decision to remain in education long-term (needs a period, rather than a question mark, on the end). It sounds to me as though this should be a numerically rated list, rather than an Agree/Disagree type question.
 - I also wondered why salary wasn't mentioned on this list, since I haven't been able to fill my clinical coordinator position for 3 years because of this being cited as the number one reason by those who turn it down.
- On question #43, where you say to choose all that apply, the question leads me to want to go down the list and check them all, as they all seem reasonable. The list seems so "nice" that it may be biasing me to wonder how I could disagree with anything on the list? Should the respondents, instead, perhaps choose so many of the top ones, or rate them, so you can determine which are cited as MOST important?
 - Also, I wondered if the word "professional" needed a working definition shared, as it might be interpreted differently by various people.

Please remember that I'm viewing this with a reflectively critical eye only for the purpose of trying to assist you. In no way am I tearing down your work, and only you know what your final intentions are with this information. I do not.

Thank you for asking me to be involved in this, as it certainly helps me think on all those same sorts of issues that I'll soon be dealing with.

Greatest success to you in completing your fine work,

From:

Sent: Monday, February 14, 2011 4:40 PM

To: Lisa Legg

Subject: RE: Input to Lisa Legg's Dissertation Questionnaire--if you so please!

Lisa,

Thank you for giving me the opportunity to review your work which I found useful and very interesting. I took a copy of your questionnaire to Graysville with me when I picked up the girls this weekend and shared it with Kay. When you put our two heads together it is always trouble so here goes.

We thought the dissertation topic and research questions were **excellent** and displayed a lot of work. On the questionnaire we had a suggestion concerning the lead in to questions 26-34 and to question 35. It could be that we are misreading the entire line of thought but we felt "least conducive" was confusing (also on lead in to 15-21 felt "helpful" would be clearer than "conducive"). Something like " which of the following factors did you find least helpful" or...did you find to be the greatest impediment (or roadblock) to your preparation to teach" or "which did you feel most hindered your preparation to teach". Again on number 35 we liked "which you found to be a roadblock"-- or "impediment" better than "least conducive".

We felt all other questions were clear and straightforward. Best wishes on a successful dissertation!

From:

Sent: Tuesday, February 15, 2011 5:06 PM

To: Lisa Legg

Subject: RE: Input to Lisa Legg's Dissertation Questionnaire--if you so please!

Hi, Lisa,

I hope that you find my critique as a FRIENDLY review and not an attack on your work. I should probably not send the attachment to you today in order to review it again before sending comments. But I am teaching class tonight, so I doubt that I'd have a chance to review this again before you need some feedback. I'm afraid that my non-response would lead you to think that I wouldn't be providing you feedback.

I typed my comments in red on a copy of your document so you could see my thoughts. Scroll through each page to find red comments.

I critiqued your survey as though I would be a participant answering your questions. I hope this is the feedback that will help your research. Feel free to ignore any of my suggestion! (-:

, MEd, RHIA

From: Lisa Legg

Sent: Thursday, March 24, 2011 10:25 AM

To: Varnell; Castleberry; Roberts; McMillan; Swafford;

	Watts;	Warren;	Sanders;	Hall;	Ross;	Hancock;	Yarbrough
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Cc: vicki-petzko@utc.edu

Subject: Input to Lisa Legg's Dissertation Survey

Hi all,

I just wanted to thank you all for the incredible feedback that I received on my dissertation survey! You all are amazing! I know that this is a busy time--and, that you took the time to review my work AND provide such constructive feedback means the world to me. This division has THE BEST FACULTY! But, we knew that already, right?

I incorporated many of your ideas and all of your corrections (thanks!). Approval came from my committee chair yesterday afternoon. I am now ready to pilot my survey--then, it will be on to collecting data! I can't believe how far I have traveled...and, how close I am to the finish line! It makes me excited, anxious, and nervous--all at once!

Again, thanks for taking time from your busy schedules to help me through a tedious process. You are most appreciated!

Kindly,

APPENDIX F FINALIZED ONLINE QUESTIONNAIRE

Survey Instructions: Thank you for taking the time to participate in the following survey. The information you provide will be of great assistance to me as I research effective indicators which may assist healthcare providers who transition into educational leadership roles and to investigate healthcare educators' perceptions of successful healthcare educators. This, in turn, will assist all of us in facilitating this transition by identifying effective methods of developing new faculty and hopefully retaining quality healthcare educators. This could ultimately affect the preparedness of future healthcare graduates.

If you agree to participate, you will be among a national sampling of healthcare educators who are currently employed in an allied health discipline in a regionally accredited college or university setting. Your responses will be completely anonymous and reported as aggregate data. Individual responses will not be identified in any way. The survey should take no longer than 10-15 minutes of your time. Your completion and submission of the online questionnaire will be considered your consent to participate in this research. Your participation is voluntary and you have the right to withdraw at any time during the completion of the survey.

If you have any questions concerning this project, please feel free to contact me or Dr. Vicki N. Petzko at the University of Tennessee at Chattanooga School of Education at 423.425.4542 or vicki-petzko@utc.edu. This project has been approved by the Institutional Review Board at the University of Tennessee at Chattanooga. Questions regarding Institutional Review Board approval may directed to Dr. Bart Weathington at 423.425.4443.

Thank you, again, for your willingness to participate!

Lisa Legg, MAEd, RT®(T)

Radiation Therapy Technology, Program Director: Chattanooga State Community College Doctoral Candidate, Learning and Leadership: The University of Tennessee at Chattanooga lisa-legg@.utc.edu

423.697.3336

- **Q1** Please indicate your gender:
- O Male
- O Female

Q2 Please indicate your age group:
O 25 or below
O 26-35
O 36-45
Q 46-55
O 56 or over
Q3 Please indicate your highest level of education:
O Professional Certification
O Associate
O Bachelor
O Master
O Doctorate
O Other
Q4 Please indicate your years of experience in healthcare education (This experience is defined as employment as a college or university faculty member—and should include the current year.) O 0-5 O 6-10 O 11-15 O 16-20 O 21-25 O 26-or more
Q5 Please indicate your employment status as defined by the educational institution:Full-time
O Part-time (teach multiple course and receive benefits)
O Adjunct Faculty (teach limited courses and receive no benefits)
 Q6 Please indicate your tenure status: Fully tenured Working toward tenure Tenure is not offered at my institution or for my position

Q7	Please indicate your academic program:
\mathbf{O}	Dental (Assisting, Hygiene)
0	Emergency Medicine (Paramedic)
\mathbf{O}	Health Information Management/Technology
\mathbf{O}	Nursing
O	Pharmacy Technology
O	Radiologic Technology (Sonography, Nuclear Medicine, Radiologic Techology, Radiation
	Therapy)
O	Rehabilitation Therapist Assistant (Occupational, Physical)
O	Respiratory Care
O	Other
O	Does your program participate in specialty/programmatic accreditation? Yes (1) No (2)
	Please indicate the geographical location of your college or university: All States Were Listed

Q10 For the following, identify how influential each factor was in your decision to transition from the clinical setting into the academic setting:

transition from the c	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
appeal of academic benefits (schedule/holidays)	•	0	•	•	•
devotion to your profession and desire to promote it	O	•	O	O	0
satisfaction received by teaching	•	0	•	•	•
opportunity to further education (obtaining an advanced degree)	O	•	O	O	•
desire to change careers	0	O	0	0	O
salary	O	O	0	O	O

Q11 Please identify any other factor, not listed the previous question, which influenced your decision to transition from the clinical setting into the academic setting?

Q12 When transitioning into your current position as a healthcare educator, which of the following factors did you find conducive in your preparation?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
your previous theoretical educational training	0	•	•	•	•
modeling instructor behaviors from your previous academic experiences	•	•	•	•	•
your previous clinical work experiences	O	O	O	O	•
assistance from colleagues, supervisor, and/or dean	•	•	•	•	•
college sponsored professional development activities	•	•	•	•	0
continuing education activities provided by your professional organization	•	•	•	•	•
mentoring activities	•	•	•	•	0
pursuing an advanced degree	0	0	•	•	•

Q13 Please identify any other factor, not listed in the previous question, which you found conducive in your preparation?

Q14 What training opportunities were offered to you at the time of your initial employment?

Q15 What opportunities do you believe would have provided you the greatest benefit?

Q16 Had you completed any educational (theoretical) courses prior to your transition into healthcare education?

- **O** yes (1)
- **O** no (4)

Q17 When transitioning into your current position as a healthcare educator, did the following factors hinder your preparation in becoming an educator?

Tollowing factors	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
lack of background in educational theory/practice	0	O	0	O	•
lack of training in instructional design	0	0	0	•	0
lack of instructional delivery skills/experience	0	O	0	Q	O
lack of classroom management skills/experience	•	O	•	•	•
lack of assessment skills/experience	O	O	O	O	O
lack of or little self confidence	•	0	0	0	•
lack of administrative support	0	•	0	O	O
lack of colleague support	•	•	•	•	•
struggling with institution's operational policies	•	O	•	•	•
overwhelming teaching/work load	0	•	•	•	•

Q18 Please identify any other factor, not listed in the previous question, which hindered your preparation?

Q19 What experiences or activities were you most unprepared to do as a new healthcare educator?

Q20 For the following, indicate how influential each factor is in your decision to remain in education long-term?

education long term.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
the appeal of academic benefits (schedule/holidays)	O	0	0	0	0
devotion to your profession and desire to promote it	•	O	•	•	•
satisfaction received through teaching	O	•	O	O	O
academic freedom/independence	O	•	O	O	O
desire for continued growth and development within the profession	•	O	•	O	0
salary	O	O	O	O	O

Q21 Was there some other factor, not listed in the previous question, which would be influential in your decision to remain in education long-term?

Q22 From the list below, choose the five demonstrated behaviors which you feel lead to
the development of an effective healthcare educator:
☐ sensitive/responsive to student needs
excellent communication skills
☐ adaptable
☐ efficient classroom management skills
quality instructional methods
☐ appropriate level of knowledge/skill
☐ organized
☐ professional
☐ ethical
□ motivated
Q23 Is there anything else that you would like to add or share about your pre-teaching

Thank you for participating in this survey. If you would like the results of this survey and/or a link to the completed dissertation, please email me at lisa-legg@utc.edu. I will be happy to provide that information to you at the conclusion of the research.

experiences and/or your current teaching experiences?

APPENDIX G ONLINE QUESTIONNAIRE PILOT STUDY INFORMATION

From: Lisa Legg

Subject: Pilot Study for Dissertation Survey



Thank you so much for agreeing to pilot my dissertation survey! You have no idea how much this means to me! You will most definitely get a special 'shout out' in my acknowledgments... And, I will certainly return the favor—just tell me when, where, and how!

The next email you receive will be the 'official' email with instructions.... Please let me know if you have any questions.

Thanks again,

L

Lisa Legg, MAEd, RT(R)(T)
Chattanooga State Community College
Radiation Therapy Technology, Program Director
4501 Amnicola Highway CBIH-126
Chattanooga, TN 37406

Office: 423.697.3336 Fax: 423.697.3324

lisa.legg@chattanoogastate.edu

From: Lisa Legg

Sent: Wednesday, March 30, 2011 3:50 PM **To:** 'ledu' .edu'

Cc: 'lisa-legg@utc.edu'

Subject: Request to Participate in a Dissertation Survey for Lisa Legg

March 30, 2011

Dear Dean/Department Head:

My name is Lisa Legg and I direct the Radiation Therapy Technology program at Chattanooga State Community College. In addition, I am engaged in the dissertation process of the Learning and Leadership Doctoral program at the University of Tennessee at Chattanooga. I am writing to respectfully ask that you forward this message, along with a personal statement of support, to the appropriate healthcare educators in your department/division so that they might participate in my research by completing a brief online questionnaire.

Through this research, I am hoping to identify effective indicators for healthcare providers who have transitioned into healthcare educator leadership roles and examine healthcare educator perceptions of the characteristics of effective instruction. It is my hope that this research will lead to the identification of methods that will facilitate the transition from healthcare to academia. Long-term, this could improve faculty retention and strengthen program graduate quality via better instruction.

If you and/or your faculty agree to participate, you will be among a national sampling of healthcare educators nationwide who are currently involved in educating the next generation of healthcare providers. Your responses will be completely anonymous; individual responses will not be identified in any way. Every precaution will be taken to assure complete confidentiality and privacy of your information. Only I and my dissertation committee will have access to the data. Your participation is voluntary and you have the right to withdraw at any time during the completion of the survey.

The information you provide will be of great assistance to me as I strive to complete my doctoral degree. If you have any questions concerning this project, please feel free to contact me or Dr. Vicki N. Petzko at the University of Tennessee at Chattanooga School of Education at 423.425.4542 or vicki-petzko@utc.edu. This project has been approved by the Institutional Review Board at the University of Tennessee at Chattanooga. Questions regarding Institutional Review Board approval may directed to Dr. Bart Weathington at 423.425.4443

Your completion and submission of the online questionnaire will be considered your consent to participate in this research.

The survey will only take 10-15 minutes of your time. I would ask that you encourage your faculty to complete this survey within the next two weeks. You may begin the survey by accessing the following link:

https://utceducation.qualtrics.com/SE/?SID=SV_0TAnZkMWOTKychm

Additionally, I would like to ask you and your faculty to provide me with any comments or issues concerning this survey, in general—ease in maneuvering through the survey, clarity of the questions, etc. Comments and concerns can be directed to my attention at lisalegg@mocs.utc.edu. These comments will help me fine-tune the survey before distributing it nationwide.

Kindly,
Lisa Legg, MAEd, RT(R)(T)
Radiation Therapy Technology, Program Director
Chattanooga State Community College
Doctoral Candidate, Learning and Leadership
The University of Tennessee at Chattanooga
lisa-legg@mocs.utc.edu
423.697.3336

APPENDIX H INVITATION TO PARTICIPATE IN DOCTORAL DISSERTATION EMAIL

On Mon, Apr 18, 2011 at 1:22 PM, Lisa Legg <vsb958@mocs.utc.edu> wrote: April 18, 2011

Dear Dean/Department Head:

My name is Lisa Legg and I direct the Radiation Therapy Technology program at Chattanooga State Community College. In addition, I am engaged in the dissertation process of the Learning and Leadership Doctoral program at the University of Tennessee at Chattanooga. I am writing to respectfully ask that you forward this message, along with a personal statement of support, to the appropriate healthcare educators in your department/division so that they might participate in my research by completing a brief online questionnaire.

Through this research, I am hoping to identify effective indicators for healthcare providers who have transitioned into healthcare educator leadership roles and examine healthcare educator perceptions of the characteristics of effective instruction. It is my hope that this research will lead to the identification of methods that will facilitate the transition from healthcare to academia. Long-term, this could improve faculty retention and strengthen program graduate quality via better instruction.

If you and/or your faculty agree to participate, you will be among a national sampling of healthcare educators nationwide who are currently involved in educating the next generation of healthcare providers. Your responses will be completely anonymous; individual responses will not be identified in any way. Every precaution will be taken to assure complete confidentiality and privacy of your information. Only I and my dissertation committee will have access to the data. Your participation is voluntary and you have the right to withdraw at any time during the completion of the survey.

The information you provide will be of great assistance to me as I strive to complete my doctoral degree. If you have any questions concerning this project, please feel free to contact me or Dr. Vicki N. Petzko at the University of Tennessee at Chattanooga School of Education at 423.425.4542 or vicki-petzko@utc.edu. This project has been approved by the Institutional Review Board at the University of Tennessee at Chattanooga. Questions regarding Institutional Review Board approval may directed to Dr. Bart Weathington at 423.425.4443.

Your completion and submission of the online questionnaire will be considered your consent to participate in this research.

The survey will only take 10-15 minutes of your time. I would ask that you encourage your faculty to complete this survey within the next two weeks. You may begin the survey by accessing the following link:

https://utceducation.qualtrics.com/SE/?SID=SV_0TAnZkMWOTKychm

Kindly,
Lisa Legg, MAEd, RT(R)(T)
Radiation Therapy Technology, Program Director
Chattanooga State Community College
Doctoral Candidate, Learning and Leadership
The University of Tennessee at Chattanooga
lisa-legg@mocs.utc.edu
423.697.3336

APPENDIX I

REMINDER TO PARTICIPATE IN DOCTORAL DISSERTATION EMAIL

On Mon, May 2, 2011 at 2:48 PM, Lisa Legg <vsb958@mocs.utc.edu> wrote: May 2, 2011

Dear Dean/Department Head:

On April 18th I sent you an email inviting you and your faculty to participate in my doctoral study. Through this study, I am hoping to identify effective indicators for healthcare providers who have transitioned into healthcare educator leadership roles and to examine healthcare educator perceptions of the characteristics of effective instruction. I have received responses from a number of you and your faculty; I genuinely appreciate your willingness to participate. However, if you, or your faculty, have not yet had the opportunity to complete the 10-15 minute survey, I hope that you will do so by May 9th by following the link below:

https://utceducation.qualtrics.com/SE/?SID=SV OTAnZkMWOTKychm

If you have any questions concerning this project, please feel free to contact me or Dr. Vicki N. Petzko at the University of Tennessee at Chattanooga School of Education at 423.425.4542 or vicki-petzko@utc.edu. This project has been approved by the Institutional Review Board at the University of Tennessee at Chattanooga. Questions regarding Institutional Review Board approval may directed to Dr. Bart Weathington at 423.425.4443.

Your completion and submission of the online questionnaire will be considered your consent to participate in this research.

Thank you in advance for your assistance with this study.

Kindly,
Lisa Legg, MAEd, RT(R)(T)
Radiation Therapy Technology, Program Director
Chattanooga State Community College
Doctoral Candidate, Learning and Leadership
The University of Tennessee at Chattanooga
lisa-legg@mocs.utc.edu
423.697.3336

APPENDIX J

RAW DATA ASSOCIATED WITH TRAINING OPPORTUNITIES OFFERED TO HEALTHCARE EDUCATORS AT THE TIME OF INITIAL EMPLOYMENT

Note: Responses are included as they were received—no editing has been done. Coding for emergent themes has been added parenthetically at the end of each response.

- Funding for society annual meetings, seminars, and training sessions.
 (professional meetings)
- Program Director/Department Chair mentored me. Other faculty were also helpful with techniques. (mentoring)
- only school wide inservices such as classroom dynamics and writing across the curriculum (college in-services)
- None. (none)
- Class on use of Power Point and Excell were offered by the institution. Other classes were taken at professional meetings that offered education-related topics. (computer classes, professional meetings)
- Campus workshops, professional development funding, and new faculty orientation (campus in-service, professional development, orientation)
- I had just completed my masters in education, so initially I was trained on the school's system. (computer classes)
- College teaching/learning best practices (best practices)
- Received orientation to college policies (orientation)
- Mentoring Had to take a small number of education courses (mentoring, college courses)
- None immediately. Few months later began state supported training in education for non-education majors. (none)
- I was required to take 9 hours of education courses (at my own expense) to receive a teaching certificate. (college courses)
- 32 years ago there were none in place. (none)
- None. (none)
- no official, only mentor (none, mentoring)
- Limited, mostly on-the-job, on-the-fly training. (on-the-job training)

- There was a general orientation and you had a faculty mentor. The amount of help that you got varied greatly on your mentor. (orientation, mentoring)
- Orientation, later Boot camp for nursing instructors and nurse educator conferences (orientation, boot camp)
- None (none)
- None (none)
- continuing education seminars (continuing education)
- Skills Soft, Online program training (Angel/WebCT), an Instructor
 Effectiveness course. (continuing education, computer classes.)
- None (none)
- The College offers Adjunct training, which I took several years ago. As a new full-time faculty member, I was assigned a mentor in the School of Nursing.
 New hires and their mentors meet once a month for a lunch meeting during the first year of employment. The College offers an Employee Development Day each year. (mentoring, college in-service)
- college pedagogical courses that built the tenure/teaching process (college courses)
- First year Faculty Experience, Mentor, Department of Coninuing Teaching and Learning, Fall Faculty Development, workshops (mentoring, continuing education, college in-service)
- Professional development funds to pursue my masters degree. Mentoring from the faculty I was replacing. (college courses, mentoring)
- Computer/IT. (computer classes)
- None (none)
- I attended numerous college based in-services as well as national conferences related to program accreditation. (college in-services, professional meetings)
- Adjunct certification course Mentoring and coteaching courses (mentoring, team teaching)
- Continuing education (continuing education)

- None (none)
- None (none)
- the college has a mentoring program for new educators which was very beneficial. Also received training in Blackboard Learning Management System and Tegrity Audio Lectures. Also, attended AHIMA Assembly On Education (AOE) Faculty Development meeting in the summer of my first year which was very beneficial. The curriculum included syllabus and test preparation specific to HIT and HIM programs. (mentoring, computer classes, professional meetings)
- 32 hours of orientation followed by monthly orientation meetings (orientation)
- We had a mentoring program, but I feel teaching in allied health is so specialized, and the mentoring program seemed geared towards people teaching more general education classes. (mentoring)
- Very little. (none)
- none were offered (none)
- Advising Workshop, PeopleSoft training, Blackboard training, New Faculty
 Orientation to the campus (college in-service, continuing education,
 computer classes, orientation)
- a general college orientation (orientation)
- None but it was 30 years ago (none)
- Mandatory monthly inservice of about 1 hour in length. (college in-services)
- Various teaching methodology courses. (continuing education)
- Faculty seminars (college in-services)
- Nothing (none)
- None (none)
- shadowing other clinical faculty (team teaching)
- educational advancement (not understandable)
- none (none)
- NONE! At this school, I asked about a position, I had an interview, I was hired—literally within a week. My assignment included teaching nursing

informatics (what was that I wondered) online. I was given a book, a syllabus and told that our IT person no longer worked there. I'd never used blackboard vista and....the class began a week earlier. This is no joke. I pulled it off but told the person who would become my dean that I was not going to work in this type of environment. Her leadership transformed this department and she has been a valuable asset to me. (none)

- Boot Camp for Educators (boot camp)
- None. (none)
- Faculty development seminars, computer training (college in-service, computer classes)
- Just the usual orientation. (orientation)
- None (none)
- Mentoring with another instructor for course preparation; weekly mentoring with the department chair; and attendance of an AHIMA program in ICD-10-CM/PCS training. (mentoring, professional meetings)
- Mentoring, further educational opportunities and hands on training (mentoring, on the job training)
- Instructional support (not understandable)
- We have a department that provides faculty educational development (college in-service)
- Professional development within the college. Mentoring, workshops, weekend retreats, one on one assistance (professional development, mentoring, weekend retreats)
- Taking degree courses during the day. (college courses)
- A mentor, and a poscribed course in teaching, short duration, on-campus.
 Very helpful. (mentoring, college in-service)
- There were no formal training opportunities offered to me at the time of my initial employment. That is not the case today for new educators entering the institution. (none)
- Short initiation process for rules and regulations, nothing more. (orientation)

- New faculty training and regular faculty professional development (orientation, college in-service)
- None (none)
- Mentoring only. (mentoring)
- basic orientation to the college. The rest was pretty much on my own. I asked a seasoned faculty member to be my mentor- for the rest, it was almost like being a new graduate and 'eaten alive'. I attended workshops on my own and took what I learned in my master degree courses to apply to what I was doing. (orientation, college in-services, college courses)
- Not very many. The whole program was new with new instructors. (none)
- None. (none)
- Various professional development training courses (professional development)
- None (none)
- None (none)
- Mentor (mentoring)
- A structured class over 2 semesters regarding college orientation and teaching effectiveness. (orientation)
- required to take and pay for 36 hours of educational courses in order to keep teaching certificate (college courses)
- none (none)
- orientation (orientation)
- Orientatio, faculty mentor (orientation)
- Institutional Professional Development (college in-service)
- None (none)
- NONE (none)
- New faculty orientation Nurse Educator Conference (orientation, professional meeting)
- Best Practices (best practices)

- I cannot remember that far back. I do remember the teaching team I started with. We were all colleagues and really loved working together. Since that time, I have always yearned for a simular experience. (team teaching)
- None (none)
- None (none)
- The institution provides a comprehensive first year experience for all new full time faculty members. Monthly meetings with required attendance that focused on various topics relevant to my employment. I also had a senior faculty member who was my "mentor" and helped a great deal. Additionally, I was hired at the beginning of the academic year and the entire faculty attended a two day training event. (college in-services, mentoring, orientation)
- College courses to complete teaching license requirement Professional development offered by employer (college courses, college in-services)
- No officaial training; assigned a mentor. (mentoring)
- Center for Teaching and Learning has a first year faculty program in place to train fulltime faculty in becoming effective teachers besides having seminars each quarter to train us in using the innovative technologies in teaching (college in-services)
- Professional development and new hire development (college in-services)
- None (none)
- Mandatory new faculty inservices on teaching, encouragement to attend professional conferences on nursing education (college in-services, professional meetings)
- different symposiums (not understandable)
- Orientation for new educators (orientation)
- Many opportunities at the college. (not specific)
- A strong orientation program as well as mentors that truly cared about the students and the message that was being delivered (orientation, mentoring)
- Very little to none (none)

- I don't recall. (not specific)
- Unfortunately not many. (none)
- Leadership, management, and specialty field training. (not specific)
- Minimal some mentoring by the program director (mentoring)
- Mentoring (mentoring)
- mentoring with an experienced faculty / orientation to include a modified load until comfortable (mentoring, orientation)
- Very little. I had a good mentor but she also had a heavy teaching load and it
 was difficult to transition into classroom teaching. The clinical portion was
 fine but classroom was a struggle. (mentoring)
- collegial support of my team of instructors, continuing education programs (mentoring, continuing education)
- none at initial employment, but over the years, these opportunities have become available (none)
- Nursing grand rounds, tuition reimbursement, (college courses, grand rounds)
- Yes. In-service education. Attendance at seminar, for example the TIPS
 (Teaching Improvement Project System) sponsored by the Univ. of Kentucky
 (1980's) plus other educator seminars. (college in-service)
- Orientation / Team Teach/Observe / Course offerings during Faculty
 Development Week incorporating various topics to choose from (Engaging the student, Culture Diverse Student Populations, Rubrics, etc.) (orientation, team teaching, college in-service)
- mentored by existing, experienced faculty (mentoring)
- workshops on teaching and learning (college in-service)
- Other than mentoring from peers, nothing was specifically offered.
 (mentoring)
- / None! (none)
- Professional development and Academic fellowship. (professional development)

- Continuing education through the school (continuing education)
- Workshops through the colleges teachers learning academy (college inservice)
- THIS INSTITUTION HAS ALWAYS PROVIDED EVERYTHING (INCLUDING PATIENCE) TO SEE THAT I HAVE ALWAYS HAD ALL THAT I NEEDED TO SUCCEED IN MY JOB. CONSTANT EDUCATIONAL OPPORTUNITIES IN THE FORM OF WORKSHOPS, ETC., THAT ENHANCED MY JOB PERFORMANCE HAVE ALWAYS BEEN MADE AVAILABLE. (college inservices)
- None (none)
- None (none)
- Faculty Mentor / Assistance with lectures, testing procedures (mentoring)
- Very little, but I did have a faculty mentor who was an enormous help acclimating to the institution and teaching (mentoring)
- None (none)
- Some on line tutorial only (on-line tutorials)
- None (none)
- Mandatory completion of state teaching certification, various professional education opportunities both in education and in Medical Imaging. One-onone mentoring, support from various college departments... (college courses, mentoring)
- None, just the college's initial new employee orientation. (orientation)
- Everything from basic college information to meeting collegues, educational workshops (orientation, college in-services)
- Policies and procedures only (orientation)
- None (none)
- College sponsored seminars (college in-services)
- Periodic Best (educational) Practices workshops. (best practices)
- Any I could find. The institution helped a lot. (not specific)
- None (none)

- Mentoring by other faculty in Allied Health (mentoring)
- Peer mentor relationship teaching partner. (mentoring, team teaching)
- Support of other full time faculty member in the program (mentoring)
- Very little. (none)
- None (none)
- professional development opportunities at the college are readily available. I
 was assigned a mentor. (college in-service, mentoring)
- There was one program called "Best Practices" that is suppose to be helpful to new hires. It was offered on Fri from 3-5 once a month. Very inconvenient time. I personally have not had enough face to face teaching time to find this program effective for me as this was my first year as a faculty member. Next year I think it would be more of a benefit. (best practices)
- Mentor and new faculty development (mentoring, college in-services)
- RCU at Mississippi State (not specific)
- Professional Development opportunities college-wide related to education.
 Mentoring by other faculty in my teaching level and clinical facility. (college in-services, mentoring)
- Mentoring program; We have a faculty center for teaching and learning and also a Center for Organizational Success that offer MANY programs.
 (mentoring, college in-services)
- Peer mentor, various educational and professional sessions and clases (mentoring, college in-services)
- At that particularly time, very little. Our professional development has improved significantly over this past decade. (none)
- Some peer mentoring. My teaching partner was a great mentor. (mentoring)
- None (none)
- Mentoring, orientation (mentoring, orientation)
- The institution enrolled me in an intensive 2 week "vocational" education course offered by the university. The course or program is no longer available. It provided me with the basics of syllabus construction, writing

- objectives and lesson plans, test construction and classroom management. (college in-service)
- None (none)
- mentoring, formal and informal orientation (mentoring, orientation)
- to take the "Instructional Efffectiveness" course and the New Faculty
 Orientaion workshops were very helpful. (orientation, college in-services)
- None (none)
- Minimal Faculty Development offerings seminars, classes (college inservices)
- Many through our Employee Devlopment Program at this college. (college inservices)
- None (none)
- None for teaching or preparing to teach. I was required to attend orientation
 meetings overly filled with information about the college and programs the
 college offered. So much information that it was overload and I remembered
 little of it, stressing over my lack of preparation time for students.
 (orientation)
- Computer training, registration assistance (computer classes)
- None (none)
- Eighteen week college orientation (orientation)
- None (none)
- one week at MS State University curriculum department required / / 6
 mandatory courses for vocational faculty required for college credit
 (orientation, college courses)
- new teacher workshop (college in-services)
- I had a mentor, but was I really felt I was "on my own" most of the time.
 (mentoring)
- tenure process (not specific)
- new faculty workshops (college in-services)
- College in-services, mentor program (college in-services, mentoring)

- Professional development funds to use for workshops etc. Support from fellow faculty members and director. (professional development, mentoring)
- Mentor for a year. Orientation the first week and each month for a year.
 Programs offered by the Center for Excellence each week. Feedback ffrom the supervisor. (mentoring, orientation, college in-services)
- When I was initially employed in 1977, I was totally out in the dark, so to speak. The school was transitioning from / one method of teaching to another and I had no clue of what was expected of me. At the time, I had only a BS in / Nursing Degree with no education background. I had to write my own objectives for the topics I taught and my / own lectures from scratch. You can see what a struggle that was. Now when people are hired, they are mentored / and most "inherit" lectures already written. (none)
- Don't remember minimal I believe (none)
- Employee Development was offered as a general training opportunity for faculty. However, it would have been helpful to have a mentor in the nursing department. (college in-service)
- None (none)
- I enrolled in a Master's Degree program, otherwise, a strong mentoring system in my second semester of teaching. (college courses, mentoring)
- None (none)
- None; I was in grad school at the time. (none)
- New employee orientation workshops. / / Mentor-mentee program. / /
 Supportive network of colleagues. (orientation, mentoring)
- Different professional development mini inservices (put on throughout the first year by the office of institutional effectiveness) A required online introduction to the college's computer system as well as teaching effectiveness course related to the health science division. (college inservices, on-line tutorials)
- None by my employer. I took a one-day workshop on allied health education and started work on a masters in education. (none)

- Avising training. Other than that not much teaching education. (college inservice)
- Mentorship / Certification courses / Professional development for systems in place at the college (mentoring, college in-services)
- methodology course in creating syllabii, learning objectives, etc. (college inservices)
- Orientation to college processes but no instruction on teaching methods (orientation)
- MANY INSERVICES THAT FOCUSED ON STUDENT TEACHING AND BEING AN EFFECTIVE INSTRUCTOR (college in-services)
- Very few. It was primarily on the job training. (on the job training)
- None (none)
- Teaching certification course offerings and basic new employee training session (orientation, college courses)
- Oriented by Lead instructor. Available tech training offered to all instructors within the institution. (team teaching, orientation, computer classes)
- Computer Training / College Paid return to graduate school (computer class, college courses)
- None! On the job training. The institution did send me to an Accreditation
 Work Shop to write the Self Study. (none, on the job training)
- conference sponsorship, one-on-one discussion with the program director, mentoring, new faculty orientation provided at start of each academic year for three years, continuing learnign opprotunities provided by the college (seminars, workshops,etc.) (professional meetings, mentoring, orientation, college in-services)
- New teacher workshop was required and some Human Relations class required to update my previous education license. (college in-services)
- No (none)

APPENDIX K EMERGENT THEMES ASSOCIATED WITH TRAINING OPPORTUNITIES OFFERED TO HEALTHCARE EDUCATORS AT THE TIME OF INITIAL EMPLOYMENT

A total of 197 participant responses was recorded.

From the responses, a total of 263 themes was extracted, coded, and categorized as follows:

- None 59 (22%)
- Mentoring 48 (18%)
- College in-services 47 (18%)
 - classroom dynamics, writing across the curriculum, employee/faculty development, first year comprehensive experience, teaching and learning center programs, engaging the student, cultural diversity, rubrics, teacher's learning academy, center for organizational success, 2-week 'educational' course, advising, registration
- Orientation 35 (13%)
 - to the college, processes, tenure, new faculty procedures, 18-week session
- College courses 14 (5%)
 - education, pedagogy, teaching certification
- Computer classes 10 (4%)
 - PowerPoint, Excel, internal system, WebCT
- Continuing education 8 (3%)
 - soft skills, instructor effectiveness, teaching/learning, teaching methodology
- Professional meetings 8 (3%)
- Team teaching 6 (2%)
- Professional development 5 (2%)
- Best practices 4 (2%)
 - teaching/learning
- On the job training 4 (2%)
- Boot Camp 2 (1%)
- On-line tutorials 2 (1%)
- Grand Rounds-RN 1 (0%)

- Weekend retreats 1 (0%)
- Those comments which were not understandable or not applicable 9 (3%)

APPENDIX L RAW DATA ASSOCIATED WITH THE DESIRED TRAINING OF HEALTHCARE EDUCATORS

Note: Responses are included as they were received—no editing has been done. Coding for emergent themes has been added parenthetically at the end of each response.

- The mentoring of those who had been an educator for several years.
 (mentoring)
- Mentoring by experiences educators in the field (mentoring)
- previous clinical teaching experience (teaching experience)
- Programs on topics in education, such as pedagogy, assessment, test writing, etc. (educational courses)
- An orientation session for all new instructors offered by the institution. A
 class for therapy faculty in the first 5 years of their teaching experience that
 was started by a professional organization after I had passed this time frame,
 but that I went to anyway. (orientation)
- Formal mentor assignment and long term mentoring relationship;
 opportunities to observe experienced faculty in classroom and clinical settings (mentoring)
- None that I can think of (none)
- Preceptor (not specific)
- Course on effective teaching technique and strategies. (education courses)
- A FAQ guide for clinicians entering education (teaching guide)
- closer mentoring (mentoring)
- Mentor program and an orientation to the general college (mentoring, orientation)
- Preparation in theories of teaching. (education courses)
- specific orientation, more involved mentor (orientation, mentoring)
- More formalized training, perhaps competency-based training. (education courses)
- Workshops that would focus on first year faculty and classroom management and teaching. (education courses)

- Nurse boot camp for instructors and mentoring at the local level (boot camp, mentoring)
- Education courses "how to teach" (education courses)
- Intro to the computer resources of the JC and basic teaching practices such as writing syllabus, lesson plans and lab activities. (computer classes, education courses)
- being mentored clinically (mentoring)
- Instructor Effectiveness- it went into the resources that are available to new employees, students, and where additional resources can be found. (education courses)
- Educational theroy (educational courses)
- The Adjunct training was my introduction to classroom management. Having a mentor to whom I could go with questions was very valuable. (mentoring)
- previous experience in practice (clinical experience)
- Mentor, workshops(mentoring, college in-services)
- Having the masters degree before I started teaching. (requiring a degree before teaching)
- Explanation of teaching, the techniques used, pedagogy applied, and how the material taught would affect the student in transitioning into a new role. (education courses)
- Online software training (computer classes)
- More time spent following other academic administrators and observing interactions with faculty including conflict resolution as well as faculty meetings. (mentoring, education classes)
- Coteaching (team teaching)
- Career and technical education classes. (education courses)
- Paid tuition (tuition reimbursement)
- advanced degree was most benefical, and tenure classes have been helpful but were greatly delayed. (requiring a degree before teaching, orientation)

- Learning how to create a syllbus, organize blackboard, and create test questions would have been very beneficial before actually teaching a class. (education courses, computer classes)
- This has nothing to do with teaching but I feel the promotion process needs
 to be explained in detail to new faculty. / It may also be nice to have a new
 allied helth teacher workshop, with other allied health instructors but noone
 has time for that. (unclear)
- A teacher training seminar with practical application of the needed skills.
 (education courses)
- Working with other faculty members in an allied health program to see how they grade students in clinicals and lab. (education courses)
- How to make a Powerpoint presentation I pretty much had others helping
 me but I think a class would have been great in the beginning. Eventually, I
 enrolled in a computer class that went through this. (computer classes)
- computer training, a formal nursing education orientation (computer classes, orientation)
- Self-paced online education for new instructors. It is OK to have it mandatory, just at my own pace and prior to the first day on the job would be appreciated! (online tutorials)
- More faculty mentoring opportunities. (mentoring)
- Teaching orientation. (orientation)
- How to produce an effective syllabus and course room techniques/learning styles (education courses)
- graduate school (unclear)
- Classes on course structure and effective effective exam design (education courses)
- one-on-one time set aside to review program policies and procedures,
 clinical calibration between instructors (which we now do for new employees
 and continue to do each clinic session with each other) (mentoring)
- educational advancement (unclear)

- Mentoring / (mentoring)
- lesson planning, navigating online learning system, poating grades, / (education courses, computer classes)
- Support from colleagues. Everyone was stretched so thin, I had no support.
 (mentoring)
- Having an assigned mentor for the first year. (mentoring)
- A strong mentoring program. (mentoring)
- One to one mentoring (mentoring)
- True peer mentor. (mentoring)
- A strong mentor. (mentoring)
- an orientation to academia (orientation)
- A better mentoring experience...more formalized. (mentoring)
- The train the trainer programs are a great resource for the upcoming changes in the HIM coding area. The seminars/instructor development courses that are offered through the college are of great benefit as well. (train the trainer)
- There was adequate support and encouragement (none)
- Over the years, there has been much more emphasis placed on working with new hires to help them as they transition into the educational system. But, also, there is much more technology driven educational tools that were not available when I beganm my career. What I see being offered to new hires appears to be much more than when I began 20 years ago. (unclear working with them how?)
- teaching skills and development, lesson plans (education courses)
- If you have clinical expertise but not teaching theory, you just have to jump in and try at first and then I think it's important to seek out additional professional development soon after. Sometimes I think its best to 'test the waters' first and then the information recieved in professional development becomes pertinant and usable. I you get too heavy into theory first, there may be no frame of reference to work from. (professional development)

- A longer introduction to community college processs. I had no previous community college undertand. Some high school teaching. (orientation)
- As a new faculty, I would have benefited from directed professional development in the areas of how to attain teaching excellence as well as how to build a record of scholarship. (professional development)
- Mentoring, more one-on-one with the current staff to observe how things were done. (mentoring)
- Assistance from previous full time instructor whose place I took (mentoring)
- some classroom management and theory of education especially of the college philosophy (education courses, orientation)
- The mentoring I received provided immediate and extremely beneficial results. (mentoring)
- To be able to sit with several faculty and get their tips on 'what to do or not do', have regular meetings with colleagues teaching the same courses I was to make sure we were on the same page. To have more opportunity to be involved with the college as a whole and not just the nursing department. (mentoring, integration into the college)
- Jumping in and teaching. Learning to meld the clinical side with the didactic.
 (education courses)
- Mentoring, or the opportunity to join a professional study group. (mentoring)
- Professional development specifically related to teaching modalities,
 methods, pedagogy (education courses)
- Classes on how to teach. I had no idea what to do other than gather from my
 memory how I was taught. I relied heavily on materials from the previous
 instructor, who is still a colleague of mine. I am completing my Bachelors
 degree in Occupational Training and Development next month and have
 applied what I have learned. (education courses)
- some type of mini workshop to prepare non teaching majors to teach in the college classroom. Beyone the usual preparation of the course schedule: teaching style, writing lesson plan, etc. (education courses)

- Better College orientation; better program orientation. We only had a mentor. (orientation)
- A classroom mentoring experience (mentoring)
- some course work coupled with adequate time off to get the work done/some financial assistance would have been nice as well. had already taken a tremendous cut in pay -but it was my choice (unclear)
- none (none)
- an educator residency, partnered with another instructor in a meaningful way (mentoring)
- Formal professional opportunities. (unclear)
- Curriculum development, course design, educational theory courses, classroom managment, abnormal psychology (education courses)
- ANYTHING WOULD HAVE BEEN BETTER THAN NOTHING WHICH IS WHAT I RECEIVED - "NOTHING" (anything/not sure)
- Not sure (anything/not sure)
- To have a mentor. I don't believe I have ever had what I would call a mentor.
 (mentoring)
- Teaching instruction (education courses)
- Office environment adjustment (orientation)
- I was comfortable with the opportunities presented. (none)
- Specific guidelines, policies, and structure in formatted form such as a mentor book which has been implemented since I was employed with the college. (teaching book)
- learning what there is available to us as faculty in dealing with the everyday aspects of teaching. (orientation)
- They really were already provided. (none)
- Mentoring or designated mentor. (mentoring)
- Nursing conferences on nursing education (professional development)
- Mentorship ans selesction of an appropriate person would have had a greater impact. (mentoring)

- An opportunity to observe the previous program director in her role so that I could understand the jargon and some of the processes that were essential.
 (mentoring)
- Orientation, mentoring are all very important (orientation, mentoring)
- Scheduled time with a faculty mentor from another discipline. I knew the
 material I needed to teach, but not always the best way to interact with
 students in the classroom setting. Also, help with writing syllabi, setting
 course outcomes and objectives would have been helpful. (mentoring,
 education courses)
- A close mentor that would have been honest and directed me into what it takes to be a good instructor. (mentoring)
- They were all good (none)
- Information about student learning styles, and various teaching and testing techniques (education courses)
- shadowing with an experienced instructor (team teaching)
- I was offered a TIPS workshop Teaching Improvement Project Systems at the college and I was able to use this for CEU's as well. It helped me learn to write objective and the like. (education courses)
- more education in educational classes, ie test construction, classroom techniques (education courses)
- mentoring relationships / workshops on teaching strategies, etc (mentoring, education courses)
- strong peer mentoring (mentoring)
- Orientating new faculty (orientation)
- Classroom observation by peers to assist in improving teaching methods.
 (classroom observation by peers)
- Trainings specifically designed related to tieing course objectives, etc. to syllabi, projects, assignments, etc. / Developing courses from start to fininsh, tests, etc. / (education courses)
- None noted....many years ago (31) (none)

- orientation and 1:1 mentoring program for first year (orientation, mentoring)
- Orientation period. (orientation)
- Just what I got on hands experience working directly with the doctors in the ER,OR,RAD. DEPT.,SPECIALS,PACEMAKER LAB. AND ASSISTING the Physician directly with the procedure, Scrubing along the Surgeon. (on the job training)
- Academic fellowship. (academic fellowship)
- Mentorships / (mentoring)
- To teach and interact with the students (unclear)
- WORKSHOPS AND SEMINARS PROVIDED ON TEACHING AND TEST ITEM WRITING. (education courses)
- Orientation to clinical evaluation and mentoring in the4 clinical area with experineced faculty. (orientation, mentoring)
- Mentoring with other full-time Allied Health faculty. (mentoring)
- More time for preparation (more preparation time)
- Not sure. I started my M.Ed as sson as I joined the college, and those classes were helpful as my undergrad was in Business Admin. (anything/not sure)
- I think a better orientation would have helped (orientation)
- An assigned mentor, additional education relating to the adult learner.
 (mentoring, education courses)
- Effective teaching methods (more, sooner)courses (education courses)
- Mentoring, instructor training (mentoring, education courses)
- support from staff (mentoring)
- Educational pedagogy and assessment methods (education courses)
- Shadowing other instructors while they were teaching and learn different teaching/presentation techniques. (mentoring)
- Faculty Mentoring (mentoring)
- Mentorship from my superiors. (mentoring)
- A chance was given me. I took it and became a good teacher. (unclear)

- Lecture skills. Just because you're a goo Clinition dosen't mean you have the skills to teach that in the classroom. (education courses)
- More professional development opportunities (professional development)
- Opportunity to "shadow" a faculty member in the clinical environment. More comprehensive written direction/instruction on clinical paperwork requirements, department policies/procedures. (mentoring, orientation)
- Preparing lectures and exams. / Delivering lecture material. (education courses)
- Educational methods courses (education courses)
- Have not had many offered yet. (unclear)
- A real mentor would have helped and meetings/guidance from that mentor on a weekly basis. (mentoring)
- RCU courses for teaching. These are directed at the actual teaching experience/curriculum (education courses)
- Individualized mentoring. (mentoring)
- My degrees in Education--I learned so much about learning and how to prepare classes to best help students. / All of the programs offered to faculty at Ferris and Delta (unclear)
- Pursuit of Doctoral Degree for personal satisfaction. (not applicable)
- As a new instructor with no formalized training in education, I would have appreciated workshops focusing on adult learning theories, cognition strategies, constructive learning environments, educational research, etc.
 Going back to mentors...I had great mentors (other instructors, program directors, dean) so I was fortunate. (education courses)
- More education courses about teaching specifically. (education courses)
- Curriculum development, test development and assessment training.
 (education courses)
- theory of teaching (education courses)
- Starting my Masters degree much earlier in my teaching career. (requiring a degree before teaching)

- My position as the program director is an adminstrative position. Education
 about the specific budgeting codes and the logisitics of the Florida state
 grants would have been advantageous. Establishing a new program is
 challenging but understanding the constraints and documentation required of
 grants would have been helpful. (not applicable)
- The fact that I already worked as an Adjunct Faculty in clinic and didactic courses. My colleagues offering help and support were a great starter, but my Masters in Instructional Technology provided me with the greatest experience that I could apply to my curriculum. (requiring a degree before teaching)
- Better defined repeatable (best practice) processes. / (education courses)
- Teaching cerfication / classes (educaton courses)
- Mentoring. (mentoring)
- Policies and procedures related to college, department and course.
 (orientation)
- Productive mentoring, time set aside for classroom preparation, college orientation issues spread out over a longer period of time allowing for absorption of information. (mentoring, more preparation time, orientation)
- test writing workshop, lecture writing, (education courses)
- N/A (none)
- Adult learning theory course / A mentor who had time to devote to helping
 me. There were just the two of us and we were both just runnning like crazy
 all the time. (education courses, mentoring)
- observing actual classroom technique at other schools (observing other instructors)
- decreased work load and being able to observe someone teaching (observing other instructors)
- More training related to testing while in grad school (education courses)
- my mentor and past experiences (mentoring)
- observing the classroom prior to teaching (observing other instructors)

- Expansion of the mentor program...did not receive much assistance (mentoring)
- Having a supportive faculty team. (mentoring)
- NA (none)
- First of all, I was ill prepared with only a BS in Nursing to teach theory. I did
 well on the clinical level because / of all my clinical experience. / I wish I
 could have completed my MS in Nursing sooner, but finances did not permit
 that. I did get a NIMH grant / which did help pay for my MS. Also I received
 a grant from the state to help me complete my MS. (requiring a degree
 before teaching)
- Improved mentoring by faculty leaders / veterans. (mentoring)
- Mentoring by two specific faculty members (mentoring)
- Continuing Ed courses (unclear)
- Observation of other instructor's classroo0m management strategies.
 (observing other instructors)
- The instructor whose position I took over put together a whole manual for me
 related to my duties and responsibilities. This was very helpful in my
 transition. If I could of had more time shadowing her before she left, also
 would have been helpful. (observing other instructors)
- Watching master teachers from various disciplines work. Talking with them about what they did and why. (mentoring)
- More assistance and training on how to teach and deal with students.
 (education courses)
- "A day in the life of a new student" -Actually walking through the steps that
 every student encounters with enrollment in the college. This includes
 services, location of things on campus, key points of contact for each
 department, etc...(orientation)
- not sure (anything/not sure)
- More education about how to use the software systems that I would use on a daily basis (such as Blackboard and People soft), yet we had a one hour

inservice on how to use the phone. Also, the computer applications (office, email, etc.) was different from my last employer and there was no orientation to those things. (computer classes)

- A more defined mentoring and orientation program. (mentoring, orientation)
- Training for teaching in the classroom setting. (education courses)
- Everything that is offered in the teaching certification courses (Course construction, performance analysis, the adult learner). I have now completed all of these courses but having or knowing this information prior to teaching would have been a huge asset. (education courses)
- I think a broader picture about the institution and a more specific oreintation to the role the employee is expected to perform may have been of assistance. (orientation)
- A Teaching Effectiveness Course to be taken the first semester or prior to beginning of a semester. (education courses)
- mentoring (mentoring)
- Education courses (education courses)

APPENDIX M EMERGENT THEMES ASSOCIATED WITH THE DESIRED TRAINING OF HEALTHCARE EDUCATORS

A total of 181 participant responses was recorded.

From the responses, a total of 204 themes was extracted, coded, and categorized as follows:

- Mentoring (educator residency) 61 (30%)
- Educational courses 55 (27%)
 - pedagogy, assessment, test writing, effective teaching strategies, teaching theories, competency based education, classroom management, how to teach, lesson plans, planning lab activities, instructor effectiveness, educational theory, conflict management, syllabus development, learning styles, abnormal psychology, adult learners, lecture skills, constructive learning environments, educational research
- Orientation 24 (12%)
- None 8 (4%)
- Computer classes 7 (3%)
 - internal system, PowerPoint
- Observing other instructors 5 (2%)
- Requiring a degree before teaching 5 (2%)
- Anything/not sure 4 (2%)
- Professional development 4 (2%)
- More preparation time 2 (1%)
- Teaching guide (book of FAQ) 2 (1%)
- Team teaching 2 (1%)
- Academic fellowship 1 (1.5%)
- Boot camp 1 (1.5%)
- Classroom observation by peers 1 (1.5%)
- Clinical experience 1 (1.5%)
- College in-services 1 (1.5%)
- Integration into the college (rather than being isolated in the division) 1
 (1.5%)

- Online tutorials 1 (1.5%)
- On the job training 1 (1.5%)
- Teaching experience 1 (1.5%)
- Tuition reimbursement 1 (1.5%)
- Train the trainer 1 (1.5%)
- Those comments which were not understandable or not applicable 14 (7%)

APPENDIX N RAW DATA ASSOCIATED WITH FACTORS INFLUENCING HEALTHCARE

EDUCATORS TO TRANSITION INTO THE ACADEMIC SETTING

Note: Responses are included as they were received—no editing has been done. Coding for emergent themes has been added parenthetically at the end of each response.

- started as part time after birth of child (family responsibilities)
- Never practiced in clinical setting as I moved directly from graduate
 education to academic position. The greatest factor in influencing decision to
 enter academic setting was faculty influence in pharmacy school and during
 graduate education. (encouraged by former faculty)
- Not applicable (none)
- Inability to gain a nurse practitioner position in the community to which I
 wanted to move, faculty position was available (immediate job availability)
- The opportunity arose and I decided to take it. (opportunity to change careers)
- Family responsibilities (family responsibilities)
- Wanting to perform more research (opportunity to perform more research)
- At that time facing critical shortage of nurses in health care facilities but not in teaching faculty. I was tired of double & triple loads and really enjoyed teaching so took a chance on part-time rolling over to full time which it did in 2 years. (immediate job availability, physically unable to function in clinical setting, love for teaching)
- The desire to influence the end product (graduate) of higher education.
 (desire to influence graduates)
- I taught CE for years ,I thought it would be the same just more, it was not.
 (unclear)
- Na (none)
- Past disability that prevented me from working in my initial health occupation (physically unable to function in clinical setting)
- I felt that as a nurse I can have a positive impact on 5-6 patients/families a
 day. As a nurse educator I hope to have a positive impact on the nurses who

learn under me and graduate from our program. They, in turn, can care for multiple patients. Over ten years, I have had a part in educating and exciting approximately 9,000 nurses. I feel that my influence can be felt by more patients/families. (desire to influence graduates)

- Number of years in private practice, causing a slow burnout (burnout)
- Dentist I was working for was retiring. (lost clinical job)
- Desire to be a positive influence on students' lives and make a contribution to change nursing education (desire to influence graduates)
- physical requirements of job (physically unable to function in clinical setting)
- love for precepting and teaching (love for teaching)
- I wanted to teach/guide students (love for teaching)
- facilitate organizational, divisional, programmatic change development programs (love for teaching)
- I was taught at a junior college in S. California in 1985. Many of my instructors taught by threats and intimidation. I vowed that someday, I would teach but I would do it differently. Also, one night, I saw an older nurse, perhaps 65-70 years old who was working in IV therapy. Her ankles were swollen and I felt like she did not want to be there. I was 41 or so at the time and decided it was time to get going on my education or I would be her someday. At 48, I earned my MSN and I am currently working on my dissertation for a PhD in nursing education (age 55). I enjoy students, and hope that someday soon I'll never have to teach in the clinical setting again. I love the classroom and online education, I'm really sick of hospitals. (burnout)
- Retirement benefits and healthcare benefits (benefits)
- Working with students to achieve their life goals (love for teaching)
- opportunity to bring the field of dietetics (specifically Dietetic technicians) to the community (promote profession)
- was no opportunity for further advancement in my previous capacity (opportunity for advancement)

- Injury of carpel tunnel to both hands from years of overwork scanning.
 (physically unable to function in the clinical setting)
- Desire to make the students educational experience better than the one I experienced. (love for teaching)
- God's plan allowed this opportunity. (divine intervention)
- i was getting tired of the political games involved with healthcare and the emphasis being made towards making money and not helping patients.
 (burnout)
- The desire to teach. It was something I wanted to do my entire life. (love of teaching)
- I saw it as an opportunity for professional and personal growth. It seemed to be the "best fit" for me as I came into the profession with a B.S.Ed. (opportunity for personal/professional growth)
- an opportunity came up that I hadn't expected as this position have very low turnover (opportunity for advancement)
- children/family responsibilities (family responsibilities)
- none (none)
- none (none)
- NONE (none)
- Burn out from direct patient care setting. (burnout)
- I have always loved teaching and nursing. To teach nursing is the ultimate. However, I also love bed-side nursing but as I aged my body could not keep up with the demands. Nursing is a very interactive, all encompassing profession that requires all of you, physically, mentally, and spiritually. When your senses begin to dwindle and your body begins to fail you, thank God, there are other avenues of nursing open to you. (love of teaching, physically unable to function in clinical setting)
- The people I was working with at the college (colleagues)
- To promote and encourage traditional and nontraditional students into a healthcare profession. (promote profession)

- Desire to give back to the educational process of nursing, also desire to impact students to become compassionate caring nurses. (desire to influence graduates, promote profession)
- I have always participated in the education of respiratory therapists through clinical education. I feel that education is in my soul. (love of teaching)
- My age (physically unable to function in the clinical setting)
- I have always enjoyed preceptoring and mentoring colleagues. This is part was a reason to seek teaching in high education. (love of teaching)
- challenge of teaching (opportunity for a new challenge)
- It was a goal of mine before I went into nursing. I'm not sure what influenced
 it. (personal goal)
- An opportunity arose in a community college, I applied, and was awarded the position. (opportunity to change careers)
- Current demands in the work environment/field; possiblity of integration/merger and potential reengineering. The opportunity became available. (opportunity to change careers)
- Management: most of managers or directors care about numbers. Hospital adm. numbers. Got tired of doing other peoples job besides my own. (burnout)
- Second career for myself. Retired from the military. (opportunity to change careers)
- WANTING TO HAVE LEGITIMATE AUTHORITY. (wanting authority)
- I believe it is my Life Purpose to have a positive impact in young people today. This impact includes teaching them to become leaders to have compassion, integrity, a hrad work ethic, and strong moral charcter. (desire to influence graduates)
- I feel in love with teaching as an adjunct (love of teaching)
- Flexibility (flexibility)
- Flexibility while raising children (flexibility)
- Flexible schedule and full benefits for families (flexibility, benefits)

- I needed to work days instead of 24 hour shifts. (schedule)
- A desire to share my passion for my field with others. (promote profession)
- salary was the big issue. (salary)
- The ability to promote quality patient care to our future technologists.
 (influence graduates)
- Improved work hours (schedule)
- Works well with my kids schedules. I am a single mother raising 14 and 11
 year old. The academic setting is very flexible when it comes to taking care
 of my children. (schedule, flexibility)
- The need for quality healthcare providers in our area (rural underserved)
 (promote profession)
- none (none)
- The great clinical instructor and on campus instructors. I had in the
 Radiography program at Ferris State. I was also greatly influenced by high
 school teachers and how they affected me and changed my life. I hoped to
 do the same. (encouraged by former faculty)
- stable employment opportunity (job security)
- Opportunity to work with my previous mentor. (opportunity to work with my previous mentor)
- I feel it is important to give back to my profession. (promote profession)
- As a manager in a local hospital it was very difficult to obtain well trained advanced level respiratory therapists. I had been striving for years to have a respiratory care program established at the local College. In 2005 this came to fruition. (influence graduates)
- Specifically wanted a better retirement option. (benefits)
- To give back to the healthcare professions. (promote profession)
- The strong desire to help educate new nurses. I had a strong clinical background, but found that I need some help my self with the classroon didactics. (influence graduates)

- My desire to work with first generation college students who are academically underserved. (influence graduates)
- I was encouraged by my mentoring faculty member during the years I was a student to become a teacher. (encouraged by former faculty)
- The economy and loss of healthcare setting job. (lost clinical job)
- was a substitute teacher for years, always taught Sunday School this was the opportunity to merge my job as a dental assistanat with the desire to teach (love of teaching)
- I had worked at a major hospital for 21 years, was tired and did not want to go into management. At the time, there weren't alot of other positions available. I had always been a preceptor/mentor to new staff and students and really enjoyed teaching. (burnout, love of teaching)
- Jusr expanding my horizons (opportunity for new challenge)
- Another reason is the physical aspect of floor nursing. As I'm aging I find it
 more difficult to meet the physical demands. (physically unable to perform in
 the clinical setting)
- My main reason for changing was because of scheduling as I had young children at the time. However, working in the clinical setting for 20 years before teaching made me realize how difficult it would be to continue as a staff nurse as I got older. Working in the hospital with 12 hour shifts is not always the best position for a older person. You do not see too many older persons doing staff nursing because of the stress, work load, hours. I was only too happy to have a position where I could at least take a lunch break and sit down if I got too tired. In the clinical setting, as a staff nurse this is not always possible. My last position was in a nursing home and I never completed all that had to be done---It was the hardest job I ever had. (family responsibilities, physically unable to perform in the clinical setting)
- Desire to "give back" to the profession in which I have experienced tremendous success and satisfaction. Desire to experience delivery of

nursing education to the next generation of entry level nurses. (promote profession, influence graduates)

- None (none)
- I was drawn to the "teacher" role all the while I was in practice. I always knew someday I would teach full time. (love of teaching)
- Knowing that the physical aspects of my job (physical therapy)would be harder to keep up with as I get older. (physically unable to perform in the clinical setting)
- Desire for new challenge (opportunity for a new challenge)
- Job flexibility. No CALL! With children it was hard to juggle it all. (flexibility)
- decline of physical stamina (physically unable to perform in the clinical setting)
- No other factors (none)
- Course might be taught by someone without expertise in the field due to a
 lack of applicants with both education and experience in the speciaty of
 nursing being taught. I did have the education and experience, therefore I
 applied to teach the course. (unclear)
- opportunity for personal growth and teach in a different country (opportunity for personal growth)
- Previous experience as a High School Science teacher. Wanted to combine new career (Medical Assisting) with past experience as instructor. (love of teaching)
- There was a need. (unclear)

APPENDIX O EMERGENT THEMES OF FACTORS INFLUENCING HEALTHCARE EDUCATORS TO TRANSITION INTO ACADEMIC SETTING

A total of 92 participant responses was recorded.

From the responses, a total of 101 themes was extracted, coded, and categorized as follows:

- Love for teaching 15 (15%)
- Physically unable to function in clinical setting 10 (10%)
- Desire to influence graduates 9 (9%)
- Promote profession 8 (8%)
- Opportunity to change careers/new challenge 7 (7%)
- None or NA 7 (7%)
- Clinical burnout 6 (6%)
- Flexibility 5 (5%)
- Family responsibilities 4 (4%)
- Encouraged by former faculty 3 (3%)
- Retirement/healthcare benefits 3 (3%)
- Schedule 3 (3%)
- Immediate job availability 2 (2%)
- Job security 2 (2%)
- Opportunity for advancement 2 (2%)
- Opportunity for personal/professional growth 2 (2%)
- Lost clinical job 2 (2%)
- Career goal 1 (1%)
- Colleagues 1 (1%)
- Divine intervention 1 (1%)
- Opportunity to perform more research 1 (1%)
- Opportunity to work with my previous mentor 1 (1%)
- Personal goal 1 (1%)
- Salary 1 (1%)
- Wanting authority 1 (1%)
- Those comments which were not understandable 3 (3%)

APPENDIX P RAW DATA ASSOCIATED WITH CONDUCIVE FACTORS IN PREPARING FOR HEALTHCARE EDUCATOR POSITIONS

- None. (none)
- Not applicable as all reasons were covered in previous question. (none)
- Lots of reading on my own. (personal preparation)
- First hand experience as a consumer of health care. (clinical experience)
- AEIRS conferences (professional conferences)
- na (none)
- teacher certification exam, and study of psychology. (additional certifications, college courses)
- Community experience (community experience)
- I felt I brought the realism of current clinical practice to nursing education (unclear)
- My parents and husband are long-standing educators. So, mentoring into the new role with outside assistance made the transition much easier! (mentoring)
- just wanted more in my career (personal growth)
- Position as educator in the clincal setting. (unclear)
- My PhD program helped me learn to teach. My dissertation is on innovative curricula and learner-centered education. The articles I've found have helped me understand the imporance of innovation in education (advanced degree)
- I did not receive any training in teaching. It was on the job training. My chair went out on family medical leave and I was put in charge of my program 2 weeks after I started with the retired department head returning to assist me. (on the job training)
- interactivity with colleagues and informal discussion of teaching; reading on teaching. (colleagues, personal preparation)
- Time management and dedication (time management)

- My overall clinical experience was the most usefu experience I had. I would advise any health care professional interested in education to spend at least five years in the clinical setting. (clinical experience)
- none (none)
- none (none)
- NONE (none)
- Familiarity with the institution. (better orientation)
- Positive role models. (mentoring)
- Not everything is listed in the books. books are guidelines and should be taken as such. On hands experience is 75%, books 25%. (hands on experience)
- THE NEED TO HAVE GAINFUL EMPLOYMENT AND I DID NOT WANT TO WORK IN A HOSPITAL SETTING. (unclear)
- I owned my own small business, and brought many of those fundamentals of "life success" into the classroom with me. I think young people today need to learn how to overcome obstacles, have a great attitude no mattr what is happening in their lives. (personal experiences)
- M.S. degree helped me. (advanced degree)
- Educational workshop on preparing lecture plans and writing objectives (theoretical training)
- Because I worked for the MLS department as a work study student setting up labs and later as staff that helped run their online program. I feel that it was a huge benefit to my current employer. (personal experiences)
- none (none)
- The Master's Degree I received included classes that specifically focused on nursing education. (advanced degree)
- I am not clear on "mentoring activities"...was this the mentoring I received during the transition period, or mentoring I provided to others after I transitioned into education? (unclear)
- None (none)

- Obtaining information about the learning styles to assist students to be successful. (theoretical training)
- Contacting colleagues from other institutions. (colleagues)
- administrator who encouraged me and provided "time off" from classroom responisibilities (colleagues)
- My biggest factor in preparing me for my job was my previous clinical experience. In addition to that was my desire to teach. I had always wanted to be a teacher but years ago when I went to diploma school that was the only "college" work my family could afford. By becoming a nursing instructor, I became what I wanted to be in the first place. (clinical experience, desire to teach)
- None (none)
- Confidence in clinical practice experience and myself in instruction (unclear)
- professional networking (professional networking)
- none (none)

APPENDIX Q EMERGENT THEMES ASSOCIATED WITH CONDUCIVE FACTORS IN PREPARING FOR HEALTHCARE EDUCATOR POSITIONS

A total of 40 participant responses was recorded.

From the responses, a total of 43 themes was extracted, coded, and categorized as follows:

- None or NA 10 (23%)
- Clinical experience 3 (7%)
- Colleagues 3 (7%)
- Pursuing (or having) an advanced degree 3 (7%)
- Mentoring 2 (5%)
- Personal experiences 2 (5%)
- Personal preparation 2 (5%)
- Theoretical training 2 (5%)
- Additional certifications 1 (2%)
- Better orientation 1 (2%)
- College courses 1 (2%)
- Community experience 1 (2%)
- Desire to teach 1 (2%)
- Hands on experience 1 (2%)
- On the job training 1 (2%)
- Personal growth 1 (2%)
- Professional conferences 1 (2%)
- Professional networking 1 (2%)
- Time management 1 (2%)
- Those comments which were not understandable 5 (12%)

APPENDIX R RAW DATA ASSOCIATED WITH FACTORS HINDERING TRANSITION INTO HEALTHCARE EDUCATION

- also held administrative responsibilites (work load)
- Absence of knowledge on education (e.g., pedagogy) coming out of clinical graduate education. (educational knowledge)
- None (none)
- na (none)
- General lack of understanding of academia (educational knowledge)
- A couple of classes I taught the first semester, I was not familiar with the
 material such as Human Disease. I knew the material but not enough to feel
 comfortable teaching it. More comfortable with teaching HIT material.
 (content knowledge)
- some faculty function well in the mentoring role. While others are 'old school' proving the age old belief that 'nursing eat their young'---by this I mean new faculty as well as students. (mentoring)
- none (none)
- It would have been nice to be part of the "gang." Even now, we moved to a
 beautiful new building and all but one instructor is on the other side of the
 building. I am next to the dean's office (which has its benefits). I feel
 accepted but not included by some faculty members. The "cliques" that
 plague nursing abound here. (collegiality)
- Lack of taeching experience. (teaching experience)
- A lack of professional mentoring. (mentoring)
- How to make classroom bridge to the clinical setting; you can teach from a textbook but it needs to be real life, too. (educational knowledge)
- curriculum was so time intensive-little time to do other types of preparation other than getting ready to teach (preparation time)
- none (none)

- NONE (none)
- Working full time while pursuing an advanced degree. (other obligations)
- Accreditation processes, expected leadership responsibilities in the community and too many meetings. (other obligations)
- Reverting to theory to application versus application to theory. Becoming familiar with current textbooks for courses taught, etc. Application of Web Enhanced course delivery, etc. (educational knowledge, computer skills)
- None noted (none)
- NONE (none)
- None. (none)
- NONE. (none)
- N/A (none)
- The wording of the previous question is a bit tricky....if something did not hinder me, I responded 'disagree'and 'agreed' if the statement did hinder me.
 Hope that is what you wanted! (not applicable)
- Learning the culture of academia (orientation)
- Having only two instructors in the program requires us to take on more responsibilies. Each of us have two job titles. (work load)
- In my lines of authority and support, there was almost a complete attrition.
 (unclear)
- I was given many opportunities and I used them. (unclear)
- I did not feel hindered in preparation in the classroom as I had a bachelors and masters degree in education beside in nursing when I was hired.
 However this may have been an issue if I had not had this additional educational background (none)
- nO OFFICE OR COMPUTER AVAILABLE FOR 1ST FEW WEEKS (equipment)
- Was unsure how to prepare for an educational position. (orientation)
- I was thrown under the bus. I had no one to help or ask questions. I learned the hard way. (na)

- Having no time to teach in the clinical setting, I greatly missed the clinical environment. (na)
- None (none)
- Only being able to be one step ahead of the students the first year of teaching, which got better in subsequent years. (preparation time)
- In my case, the semester had already started (sudden instructor resignation). With basically no teaching experience, I was hired as an assistant professor and accepted responsibility for 23 beginning nursing students. As of this writing, I have survived and my students have performed well academically and clinically. I was very lucky to have the support of my colleagues and administration as I transitioned, but it has been a challenge! This was, I would say, an extenuating and extreme circumstance in hindering my ability to prepare for the challenges of an educator. (none)
- it was necessary for me to pay for all the required courses –(na)
- Previous professor asked to leave; interim professor not of same modality;
 one person running the program (work load)
- NA (none)
- Mostly it was lack of educational preparation on my part. (educational knowledge)
- Lack of mentoring by seasoned faculty. (mentoring)
- None (none)
- Struggled with the choice of going from a full-time clinician to an educator.
 Knowing I would miss the day to day involvement with my patients and healthcare setting in general. (na)
- not any that I can think of (none)
- Lack of time to prepare. You are basically hired, given your teaching load, given three days of orientation which was heavily focused on things that were not a priority at the time (who's who on the heirarchy, mission statements, etc.) followed one day to learn how to use college specific software for posting assignments, lectures, etc., and get ready for class. It was the

hardest, most stressful thing I have ever done. I had no idea how difficult it was going to be to transfer 25 years of clinical knowledge to students. (preparation time, orientation, computer skills)

- From day 1 I had support! (none)
- No other factors (none)
- cultural factors of teaching in a different country- language barrier, behavioral expectations, differences in perception and attitudes towards teaching and learning and limited clinical experience (cultural diversity)
- Not enough time. (preparation time)

APPENDIX S EMERGENT THEMES ASSOCIATED WITH FACTORS HINDERING TRANSITION INTO HEALTHCARE EDUCATION

A total of 49 participant responses was recorded.

From the responses, a total of 51 themes was extracted, coded, and categorized as follows:

- None 18 (35%)
- Lack of educational knowledge 5 (10%)
- Lack of preparation time 4 (8%)
- Lack of mentoring 3 (6%)
- Lack of orientation 3 (6%)
- Work load 3 (6%)
- Lack of computer skills 2 (4%)
- Cultural diversity 1 (2%)
- Lack of collegiality 1 (2%)
- Lack of content knowledge 1 (2%)
- Lack of equipment 1 (2%)
- Lack of teaching experience1 (2%)
- Other obligations 1 (2%)
 - o advanced degree, accreditation, community, meetings
- Those comments which were not understandable or not applicable 6 (12%)

APPENDIX T RAW DATA ASSOCIATED WITH EXPERIENCES/ACTIVITIES NEW HEALTHCARE EDUCATORS WERE UNPREPARED TO PERFORM

- Curriculum design and the number of years it had been since I had studied in the field. I had to really study and prepare to teach the material.
 (instructional design)
- designing assessment tools (assessment)
- counsel college students in life management (counseling)
- Assessment of student learning. (assessment)
- Deal with students' different ways of learning. (educational theory)
- Clinical instruction and supervision of nursing students in areas for which I
 had no nursing experience (educational theory)
- None that I can think of (none)
- Classrooom management/supervision / Handling difficult students (classroom management)
- Course preparation and effective delivery. (instructional design and delivery)
- Curricular design (instructional design)
- Conduct a 3 hour classroom lecture. Evaluation of a student's clinical performance. College and divisional meetings and the need to do somebackground work before and after the meetings. (instructional delivery, assessment)
- classroom management, grading, writing test questions (classroom management, assessment)
- Navigate the bureaucratic broken processes of higher education (e.g., course/faculty scheduling) (administrative processes)
- The variety of student issues that you come across. How students seemed to demand what they wanted and not that you had the expertise. (unclear)
- Academia attitude. In private sector when you work hard you are rewarded accordingly. In academia, I was surprised some colleagues slacked off

- because they "were tenured". Nursing colleagues ahving done that as much. (academia attitude)
- all the personal problems that students come into the setting with.
 (counseling)
- Test question writing (assessment)
- classroom management (classroom management)
- writing assessments and preparing lectures (assessment, educational theory)
- The amount of time that is involved both inside and outside the classroom.
 (time management)
- Clinical evaluation (assessment)
- Counseling students for poor clinical behaviors. (counseling)
- classroom learning activities (educational theory)
- classroom management, paperwork (classroom management)
- course design (instructional design)
- Lecture before large audiences, formulate test questions, initiate syllabi, and initiate working course description. (public speaking, assessment, instructional design)
- General oversight of a large nursing program, enforcing policies, understanding gray areas, interceding with faculty to faculty negativity (administrative activities, conflict management)
- None (none)
- Classroom lecture (instructional delivery)
- Curriculum Development (instructional design)
- counseling students, curriculum design (counseling, instructional design)
- Develop grading rubrics for essay type assignments, develop assignments linked to course objectives. Becoming familiar with Blackboard Learning management System was huge for me. I struggled through that for one semester. I did take a Blackboard week long training course offered during the summer. (educational theory, computer skills)

- Time management, Counseling of students trying to unfairly gain an advantage, student personality conflicts with adjunct faculty and with other students, students with legitimate external learning barriers (transportation, financial, child care etc.), students giving much less than their best effort, persistant unprofessional behavior (time management, counseling, conflict management)
- Correcting the behavior of "older" students. At first it is hard to correct or "fuss" at people 10 - 20 years older than you. (assessment)
- Classroom activities to provide for active learning. (educational theory)
- preparing for lectures (instruction design)
- When I began as the program's clinical coordinator, the program had been in place for twenty years already and I did not anticipate the need to talk to preceptors on how to supervise, provide guidance, and evaluating students HONESTLY with constructive feedback. I discovered the extremes of the seasoned preceptors which ranged from: not playing an active role in supervising (ignoring the student); being overly critical of a first year student's exam performance (who had not even completed the first year of procedures yet); OR sugar coating clinical assessments so as not to hurt a student's feelings. I took for granted that students would be treated as I treated them. This was the biggest eye opening experience by far. (educational theory, assessment)
- Committee chair and active committee work--this has been a 'learn as you go' situtation. Also, just generally learning the process of what is due next! (unclear)
- Classroom teaching (instructional delivery)
- Classroom management. Students were hard until I learned some effective ways of handling the issue. (classroom management)
- Dealing with administration, institutional polices and procedures (learning),
 the politics of higher education. (institutional policies)
- Writing a syllabus. (instructional design)

- Preparing exams (assessment)
- motivational patterns and learning strategies of adult learners / performance outcomes (e.g., graduation rates, attrition) / budgets (educational theory, administrative processes)
- Prepare effective exams (assessment)
- Use online teaching platform for delivering course content such as powerpoint, grades, lessons, syllabi, test and quizzes. If have since learned a great deal through our Center for Excellence in Teaching and Learning. / (computer skills)
- motivate the under enthusiastic student (educational theory)
- Deal. With problem students like cheating and harrassment (conflict management)
- Test writing (assessment)
- All of the time I spent preparing for classes. Not only was I given nursing informatics, I was asked to teach Psych I and Psych II and entry into practice. My expertise was in pediatrics and later, trauma. Another instructor with little experience in pediatrics had been hired a few months prior to me and she was not giving it up for psych. I guess my answer is that I was asked to teach in areas I knew little or nothing about. What I found is that I figured out how to do it, this is something that makes me feel good. (teaching areas of little content knowledge)
- Manage the complexity of the clinical education experience. (classroom management)
- Teach a class that I had to learn myself, before teaching. (teaching areas of little content knowledge)
- Produce a good handbook, handle student failures, address student professionalism issues (instructional design, counseling)
- I came from a very high paced position. It was difficult to stretch out my lectures to fill the time allotted. I was used to getting my points across without wasting words. (instructional delivery)

- Develop curriculum. (instructional design)
- classroom management, test construction (classroom management, assessment)
- Exam construction / Classroom management (assessment, classroom management)
- Working in the field of HIM and teaching are definitely two different things.
 Teaching the first CPT course was a challenge to handle the unexpected questions from the students. (classroom management)
- Developing and implementing institutional polices; understanding complex educational systems and how they relate to the practice area; implementing large scale community partnerships (administrative processess)
- produce tests (assessment)
- Varied Delivery methods, assessment techniques, curriculum design (instructional delivery, assessment, instructional design)
- providing information about topics not very familiar and having students that are not motivated (teaching areas of little content knowledge)
- Assessment. Also, changing my mindset from the working world where the
 focus is to 'weed out' the least qualified candidate for a job, to acadamia
 where the focus is to nurture the least qualified to develop to their highest
 potential. (assessment, counseling)
- college organizational working (institutional policies)
- Run a classroom and deal with undrprepared students. I believed students
 would be able to read well, at college level. Also, understanding the system
 of the community college was a big leap. (classroom management,
 institutional policies)
- How to determine if my teaching was effective. (assessment)
- Being expected to help students with personal issues not related to educational process. Dealing with problematic students in classroom setting. (assessment, conflict management)

- Handle all the clinical rotation scheduling and management on top of all other responsibilities (administrative processes)
- the accreditation process for the program (accreditation)
- Scheduling the course content for the semester. Progressive discipline for students who were not meeting program standards. (administrative processes)
- I was given the power points, the textbooks, and was told 'here you go' and that was it. Classroom management was the first challenge to wrestle with-I quickly learned that in my course syllabus was the place I could put my classroom rules and once I did that and tied it to professionalism as part of the course grade, things dramatically improved. The other thing, I was the single faculty member teaching the same content per semester that everyone else 'team taught'. It was challenging to keep things updated and caught up with clinical assignments & correcting careplans while also still doing all of the theory content alone. I worked longer hours and had as much stress although different type of stress- as an educator than I did as an ER nurse in charge of the unit on 3-11 and night shifts. (classroom management)
- Preparing objectives, syllabi, and test questions. (instructional design, assessment)
- Understanding the role of accreditation and our then system for program evaluation. (accreditation, assessment)
- Course design, online/distance learning, course development using various software technology (instructional design, computer skills)
- Lecture (instructional delivery)
- Assessment activities, develop lesson plans, write/update objectives that are meaningful (assessment, instructional design)
- test preparation/test review/handling disgruntled students (assessment, conflict management)
- Students inabilities (counseling)
- test item writing (assessment)

- none (none)
- need the students' emotional needs; deal with students who have complex personal lives and financial problems (counseling)
- Student counseling (counseling)
- Lesson plans (instructional design)
- dealing with distruptive/difficult students, dealing with clinical agency partners, creating evaluation tools, creating effective program and course resource documents (syllabi, handbooks) (conflict management, assessment, instructional design)
- PLAN LESSONS, DESIGN WHOLE SEMESTER WORKLOADS,
 ADMINISTRATIVE DUTIES, COUNSELING IN THE ACADEMIA WORLD
 AND ALL OF THOSE RULES, SELECTING NEW STUDENTS (instructional design, administrative processes, counseling)
- Teaching large classroom lectures (instructional delivery)
- Writing test questions (assessment)
- decrease in salary (decrease in salary)
- admin work that is not accounted for in workload of other educators (administrative processes)
- Balancing preparation time with office hours and in class time. (time management)
- develop lesson plans and instructional delivery methods (instructional design and delivery)
- Prepare lessons/lectures on topics that I was assigned to teach. (instructional design)
- none, previous experience as a manager dealing with subordinates (none)
- educational assessment (assessment)
- lacked self confidence in the classroom in front of students (instructional delivery)
- Design a test, prepare enough content for a 3 hour lecture twice a week,
 curriculum design (assessment, instructional design and delivery)

- writing test questions and multi-faculty decision making process (assessment, administrative processes)
- student advisement, accreditation record keeping (counseling, accreditation)
- The first year was tough.....putting it all together. Even with all the support, until you live it, its the unknown. (unclear)
- I was unprepared to help my students learn. The majority of my students
 didn't seem to have developed good study habits and it was difficult for me to
 help them learn how to study. (educational theory)
- Development of exam questions and course / unit objectives. (assessment, educational theory)
- Set up teaching methods. (educational theory)
- Political issues (administrative processes, conflict management)
- politics of the educational process, especially all of the committee work that goes on in the institution as well as the accreditation process in healthcare programs (administrative processes, conflict management, accreditation)
- Testing (assessment)
- dealing with students and their expectations for the instructor (counseling)
- Course content time management. Whenever you are teaching new material
 and unfamiliar material to students you need to be ready for the "I don't get
 that" timeline. There was no extra time built into the courses for that type of
 scenario. I spent alot of time nights/weekends helping students outside the
 typical work day. Instructional design was also an issue which I finally and in
 my M.Ed. program and was a tremendous help. (time management,
 instructional design)
- test construction, i spent hours trying to write good ones. (assessment)
- dealing with student conflict issues (conflict management)
- My previous experience was med/surg. My first teaching experience was
 psychiatric nursing. I was comfortable with the psychiatric nursing, but I
 made the mistake of asking my clinical site to bear with me because of my
 lack of psych experience. They did not "embrace" me as a credible instructor

because of it. I was able to "stand my ground" and develop a good working relationship with the clinical unit. I did this by becoming active in the Psychiatric Nursing Association. As faculty, I had resources and time to help develop the organizion from ground up with the clinical employees. This helped to improve my "expertise" immensely. (teaching in areas of little content knowledge)

- Development of test questions/design of lab activities (assessment, instructional design)
- Familiarizing self with textbook, amending schedule as needed due to students understanding of concepts or identifying a need to stay with certain chapters longer, etc. / Embracing the fact that each class is different from a standpoint of grasping material, etc. / It is not a "one size fits all" concept.
 You are constantly revising, revamping, etc. to adapt to current class. (educational theory)
- use of technology (computer skills)
- Confrontation when necessary for discipline (conflict management)
- Preparing for classes with instruction Objectives. (instructional design)
- Not being able to trust a student's word. Will say anything to attempt to have another chance. (counseling)
- Clinical evaluation (assessment)
- writing syllabi for the classroom (instructional design)
- TEST ITEM WRITING. (assessment)
- Evaluating students in the clinical setting and writing test questions according to instututional policy/guidelines. (assessment)
- N/A (none)
- Assessment of students in classroom (assessment)
- Deal with uncooperative teaching partner in a 2-person program (conflict management)
- Time management (time management)

- The majority of the activities I was unprepared for do to not be familier with the routine and structure of classes (classroom management)
- Dealing with students' personal issues that block their learning. (counseling)
- Grade! (assessment)
- Email/internet was new no training on communication via email coming from a non-profit where we shared computers. (computer skills)
- Lecture (instructional delivery)
- Write course objectives and examination questions (instructional design, assessment)
- I was more unprepared as a clinical coordinator (networking with all the different hospitals in the area)in scheduling clincal rotations for students. (administrative processes)
- Dealing with student problems. / Counseling students who were not doing well. / Dealing with student behavior issues. (academic dishonesty) (counseling)
- Navigating the administrative tasks. (administrative processes)
- Class room teaching techniques. (educational theory)
- Lecture (instructional delivery)
- program assessment (assessment)
- Organize a clinical day for students to keep them engaged and challenged in their learning. It was anxiety producing during the 1st semester or so to walk into a clinical environment that I was not familiar with, pick appropriate patients for students to care for that I could keep up with, and still maintain a sense that I knew what the students were doing (or not doing), were learning, and the patients were receiving safe care. (educational theory)
- College wide committee membership (institutional engagement)
- Prepare and present lectures. (instructional design and delivery)
- writing objectives, assessment, and basic understanding of educational pedagogy (educational theory)

- Understanding the value of assessment in teaching, how to gather and analyze data to determine if student learning was taking place. (assessment)
- GRADING MATH (assessment)
- Purchase of equipment and supplies. But I am learning fast! (administrative processes)
- Curriculum development and formal educational assessment. (instructional design, assessment)
- Not having the right material to teach. The students had one book and I had another. I was new and did not know, and no one to ask for help. (not clear)
- Write tests and decipher the statistics for the tests. Take students to clinical.
 (assessment, classroom management)
- Deal with colleagues who are indifferent and ineffective and still remain employed (academia attitude)
- Budget preparation (administrative processes)
- Adjust to the change of this generation of learners. (educational theory)
- Evaluate student success and incorporate theory into clinical practice.
 (assessment)
- Assessments (assessment)
- Valid test construction and student evaluation. (assessment)
- Previously mentioned. (unclear)
- Create exams that relate to the course objectives. I learned the hard way how to accurately assess my students' knowledge. (assessment)
- People chemistry and special and unique considerations for each of my 8 degree programs. Way more people chemistry than I expected. (administrative processes)
- Allowing the students to fail. (counseling)
- Classroom Management (classroom management)
- To be the course coordinator. (administrative processes)
- Begin teaching without adequate educational materials and time for preparation. (time management)

- Deal with students who do not do their work, but blame the instructor.
 (conflict management)
- Total lack of respect and support from the division and the general academic community (na)
- Academic advising (counseling)
- Instructional design. I had no idea how to create a lesson plan or how to manage a classroom environment. (instructional design)
- lecture for hours at a time had to find the right balance of lecture and demonstration (instructional delivery)
- technology (computer skills)
- Write test questions (assessment)
- pulling together the didactic part of the program (instructional design)
- writing exams (assessment)
- Only the long hours and non-departmental required commitments (time management, institutional engagement)
- Dealing with student issues: student's being unprepared, not taking their education seriously, having too much on their plate, being disrespectful. (counseling)
- NA University of Pittsburgh prepared me well for the educator role! (none)
- I did not know how to write objectives, write lectures, etc. (instructional design)
- Site visits from the National League for Nursing (NLN) and Southern
 Association of Colleges and Schools (SACS) / 2. Internal policy / 3.
 Curriculum Planning / 4. Working with colleagues who did not readily accept new faculty (accreditation, institutional policies, instructional design, administrative processes)
- Write exam questions. Manage difficult faculty & student personalities.
 (assessment, conflict management)
- The amount of prepartion time and the time to grade papers. (time management)

- School policies/paperwork were unfamiliar. (institutional policies)
- When I first started, I had not yet taken any classes in Testing. (assessment)
- Understanding educational jargon (learning objectives, course outcome summaries, core competencies, etc) (educational theory)
- Just the day to day planning initially. After the first semester things got going and I was able to get accustommed to my schedule and planning ahead.
 (administrative processes)
- Deal with group dynamics. Handle interpersonal issues among students.
 Establish appropriate boundaries in counseling/advising students knowing what I was supposed to handle and who to refer to when issues were outside my realm. (conflict management, counseling)
- Assessment, delivery of content. (assessment, instructional delivery)
- Course assessment tools- unsure of what depth of assessment was required with each topic/ unit/ task. (assessment)
- dealing with the physcological and emotional problems that students bring with them (counseling)
- Presenting material. Lectures and powerpoints are the worst for students but
 the easiest to make sure I stayed on track. I needed a lot of help from my
 collegues to discuss alternative teaching methods and try different things to
 engage students and keep them motivated. (instructional delivery,
 educational theory)
- Had to get educated on the various policies and procedures of college rules.
 Also, had to learn all requirements of working in an educational setting such as, JCERT rules, Accreditation.....program reviews (institutional policies, accreditation)
- Write test questions and anectdotal notes on student behaviors.
 (assessment)
- syllabus prep, classroom management, college-related responsibilities (instructional design, classroom management, institutional policies)

- The most effective way to teach and evaluate hands-on skills as there as so many radiographic positions my students need to learn. (educational theory)
- Thankfully I knew my field so I felt comfortable working with the content. I
 was most unprepared with managing the particulares of a new program in an
 environment that was still in the process of sorting it out. OPatients and a bit
 of humor helped. (administrative processes)
- The legalities of Student issues (administrative processes)
- clinical experience (unclear)
- accreditation responsibilities. (accreditation)

APPENDIX U

EMERGENT THEMES ASSOCIATED WITH EXPERIENCES/ACTIVITIES NEW
HEALTHCARE EDUCATORS WERE UNPREPARED TO PERFORM

A total of 192 participant responses was recorded.

From the responses, a total of 245 themes was extracted, coded, and categorized as follows:

- Assessment 55 (22%)
- Instructional design 29 (12%)
- Administrative processes 21 (9%)
- Counseling/Advisement 21 (9%)
- Educational theory 19 (8%)
- Instructional delivery 19 (8%)
- Classroom management 15 (6%)
- Conflict management 14 (6%)
- Time management 8 (3%)
- Accreditation 7 (3%)
- Institutional policies 7 (3%)
- Computer skills 6 (2%)
- None 6 (2%)
- Teaching areas of little content knowledge 5 (2%)
- Academia attitude 2 (1%)
- Institutional engagement 2 (1%)
- Decrease in salary 1 (0%)
- Public speaking 1 (0%)
- Those comments which were not understandable or not applicable 7 (3%)

APPENDIX V RAW DATA ASSOCIATED WITH OTHER FACTORS INFLUENCING HEALTHCARE EDUCATORS' DECISIONS TO REMAIN IN EDUCATION

- job security, variety of responsibilities, commitment of most students to learn and improve station in life (job security, variety of responsibilities, satisfaction of teaching)
- None. (none)
- Lack of desire to return to clinical work. (lack of desire to return to clinical setting)
- Working with students who are the center of my universe provide the greatest satisfaction. Seeing graduates years later working as nurses and doing a great job. (satisfaction of teaching)
- Personal desire to mentor the next generation of nurses (satisfaction of teaching)
- I have the clinical environment boring now that I have been in education. I'm never going back!!! (lack of desire to return to clinical setting)
- Did not feel could provide level of care I would desire in care facility with shortage of help as it was. (lack of desire to return to clinical setting)
- Security (job security)
- I feel this has given me another opportunity to grow and enrich myself as a person. (personal growth)
- I love my colleagues (college atmosphere)
- na (none)
- To have success stories of the graduates To develop community contacts (satisfaction of teaching, engagement with community)
- The atmosphere at our College and the group of nurses with whom I work.
 (college atmosphere)
- saving for retirement (college benefits)

- Chance to provide a positive impact on students and nursing education (satisfaction of teaching)
- I love teaching. (satisfaction of teaching)
- Love of teaching my profession. (satisfaction of teaching)
- satisfaction of seeing your students develop professionally and be successful once they have graduated from the program. (satisfaction of teaching)
- To change, one nurse at a time, how we treat each other! (satisfaction of teaching)
- The opportunity to become a fully tenured faculty member, the relationships that have developed with other colleagues. (college benefits and atmosphere)
- Love of Education and the impact of our role to foster another individual's growth and development (satisfaction of teaching)
- My salary needs to increase. Utah is a right to know salaries state. I earn \$10,000 LESS than the person who teaches in the RT program, his highest degree? Associates. I am a Californian and hope to move so I can work in a state that values women equally as much as men. I know about the glass ceiling everywhere but in Utah, a man has to support his large family which is why I believe they earn so much more than women do. At this college, the salaries for men are far greater than women. (na)
- Retirement benefits and healthcare benefits. (college benefits)
- satisfaction that you gave information that the students can use daily in their lives (satisfaction of teaching)
- job security, personal growth. (job security, personal growth)
- Very stimulating to work with colleagues on projects. I also like educational speakers the campus brings in and the sessions on improving teaching and learning. (college atmosphere, satisfaction of teaching)
- The key factor deterring me from NOT continuing in this arena is sadly, salary. There are people with only an AD or Bachelor degree making way more money than I do. One other factor that is becoming a deterrent, would

- be the type of people who are entering health care they care only for themselves and not about patients, integrity, respect, etc. (na)
- The desire to change peoples lives and offer them a satisfying profession.
 (satisfaction of teaching)
- It would be a challenge, but not impossible, to return to the clinical setting. I
 feel that I am a good fit for this job but if it were eliminated, I'd be okay. (lack
 of desire to return to clinical setting)
- state retirement system (college benefits)
- retirement benefits (college benefits)
- none (none)
- inability to return to clinical practice due to time away from the clinical setting
 and the changes in healthcare delivery (increased case loads, etc); not able
 to work in the current fast-paced environment; getting close to retirement and
 do not want to lose retirement benefits (lack of desire to return to clinical
 setting, college benefits)
- NONE (none)
- I just love it. (satisfaction of teaching)
- The people I worked with (college atmosphere)
- Age and probability of not being able to "run" for twelve hours in the hospital.
 Also productivity expectations in the profession and autonomy is diminishing in the current health care system. (lack of desire to return to the clinical setting)
- Very rewarding... (satisfaction of teaching)
- The enjoyment of seeing students be successful. (satisfaction of teaching)
- It's easy work:) (ease of the work)
- Seeing the students graduate and really enjoy the porfession watching their growth in the field (satisfaction of teaching)
- We are a Community College and salary is less for some of the faculty than the graduates. The desire to help the profession and assist with future generations coupled with the satisfaction of teaching students in a field that

you love was most important. We are not recognized for the amount of work it takes to be a healthcare educator. We are here many more hours as compared to our counterpart faculty in English, Math and Biology. There is no recognition for this. (satisfaction of teaching)

- the challenge of teaching (challenge of teaching)
- Right now, I work for a governmental agency. Due to the pension program, I am more compelled to stay here long term. (college benefits)
- None (none)
- I love teaching and watching students grow. (satisfaction of teaching)
- Retirement-Latitude in job. (college benefits)
- Loyalty to the college. (college atmosphere)
- NO. (none)
- The people I work with. (college atmosphere)
- The students keep me young-thinking! I love the dialog, the interactivity, the
 enjoyment in the classroom, and the opportunity to establish boundaries of
 excellence in my face-to-face and virtual classrooms. (satisfaction of
 teaching)
- Years left toward retirement (college benefits)
- I enjoy it. I can't think of anything I enjoy more. (satisfaction of teaching)
- No (none)
- Sponsered advanced degree (unclear)
- Stability (job security)
- I like to teach students. I learn with them. It's fun if you know how to teach well. (satisfaction of teaching)
- Ability to continue on with my education and have all courses paid for by the college (college benefits)
- LESS STRENUOUS PHYSICALLY (lack of desire to return to the clinical setting)
- Flexibility of schedule and independent work environment (college atmosphere)

- none (none)
- Good retirement, insurance, other benefits. Stability of the job. (college benefits, job security)
- I am constantly reassured that I should remain in education by the "thank-you's" I receive from graduates (satisfaction of teaching)
- Security of a job. (job security)
- Benefits and the ability to influence policy (college benefits and atmosphere)
- Education is also physically easier than private practice as a dental hygienist.
 (lack of desire to return to the clinical setting)
- None (none)
- When students call back or come back with their success stories.
 (satisfaction of teaching)
- Desire for helping students. (satisfaction of teaching)
- The good students. (satisfaction of teaching)
- close to retirement 20 years "on the job" and 18 years in teaching (college benefits)
- working with students and their desire to learn. Increasing the number of faculty and the reputation of quality the program has today. (satisfaction of teaching)
- no (none)
- Retirement benefits as well as enjoying the work atmosphere. (college benefits and atmosphere)
- How well I'll be able to handle the load of teaching and furthering my degree.
 (unclear)
- I just want to reiterate that salary isn't it. I took a salary cut to enter teaching and another one when I moved to my current college. (na)
- Health benefits, retirement. (college benefits)
- prestige (prestige)
- My perception of how sucessful I am. I will only continue to do this if I think I
 am doing a good job, and that will be determined by how successful my

students are. Also, doing a good job has got to become easier. I cannot continue to spend 7 days a week working. (level of success)

- no (none)
- It shows my young children how important education is. (personal growth)
- Professional respect in the college environment (college atmosphere)
- retirement benefits; continuing education opportunities (college benefits, personal growth)

APPENDIX W

EMERGENT THEMES ASSOCIATED WITH OTHER FACTORS INFLUENCING
HEALTHCARE EDUCATORS' DECISIONSTO REMAIN IN EDUCATION

A total of 83 participant responses was recorded.

From the responses, a total of 94 themes was extracted, coded, and categorized as follows:

- Satisfaction of teaching 27 (29%)
 - watching graduates succeed, students keep me young
- College benefits 16 (17%)
 - o retirement, tuition
- College atmosphere 11 (12%)
 - o (people I work with, activities)
- None 11 (12%)
- Lack of desire to return to clinical setting 8 (9%)
- Job security 6 (6%)
- Personal growth 4 (4%)
- Challenge of teaching 1 (1%)
- Ease of the work 1 (1%)
- Engagement with community 1 (1%)
- Level of success 1 (1%)
- Prestige 1 (1%)
- Variety of responsibilities 1 (1%)
- Those comments which were not understandable or not applicable 5 (5%)

APPENDIX X RAW DATA ASSOCIATED WITH CONCLUSIONARY COMMENTS MADE BY HEALTHCARE EDUCATORS

Note: Responses are included as they were received—no editing has been done. Coding for emergent themes has been added parenthetically at the end of each response.

- I think it is best for new instructors that have no educational background to co-teach classes initially rather than handle entire classes by themselves so that they can gain a better understanding of the way to handle students/situations as well as comply with administrative requirements. (helpful hints)
- I love what I do! (love teaching)
- None (none)
- There are so many opportunities to help students succeed. I appreciate the students who value education and strive to learn. I would like to help them all. (love teaching/students)
- na (none)
- Good to have experience in the health profession prior to teaching.... adds to real-world experiences (helpful hints)
- I wish I had made the transition earlier in my career (wishes)
- I was very disappointed to find that the promised 36 hour work week was a
 complete and total lie; and "everyone knows that's not true." I was also very
 disappointed to find the flexible schedule was a complete lie (see comment
 above). (disappointments)
- As a clinician educator, I think it is important for the college to strongly
 encourage, if not demand, faculty development related to teaching. As an
 online educator, I think it is important for a person to have been trained to
 teach online "before" teaching online. I know this can't always be the case,
 but I think it is important especially with allied health classes. (helpful hints)
- NA (none)
- It has been an opportunity of a lifetime!!!!!!!! (love teaching)

- I find that you can get your point across without being overbearing. I treat all
 my students with respect, and in return, they all respect me as well. I think
 learning can be fun. Also, we can all learn something from one another. I
 truly believe we need to connect with our students a well as guiding them to
 connect with each other. (helpful hints)
- none (none)
- I continue to grow as an educator and am constantly changing how content is delivered so that hopefully all learning styles are met. Knowledge of Bloom's taxonomy is a must for and educator as well as a good mentor. (helpful hints)
- live and learn. I never taught any year the same twice. No really good educator does. You have to always be dynamic. No two classes in 25 years were the same. That was the biggest surprise. I wasn't the same educator either/ (helpful hints)
- I will write how I feel about nursing education which doesn't exactly answer the question but influences it. I believe my previous answers say it all. I am going to finish my dissertation this year and take my PhD elsewhere. I am also taking my CNE exam this summer and that will go as well. I am discouraged more often than not at this institution. It is strongly influenced by the LDS church and while it is a state run school, I assure you it is dominated by this religion. What I do have is a supportive dean who is going to retire next year. I fear the person who may replace her--even though I do not know who that person is. If all schools of nursing are like this, low pay and too much work, I am leaving for good. Academic Freedom—a joke. (na)
- I believe that traditionally, those coming from the clinical setting into the
 academic arena are at a disadvantage due to their lack of background
 knowledge regarding teaching methodologies. It takes at least 3-4 years,
 before most new instructors become comfortbale in their role. It also
 requires a great deal of motivation on the part of new instructors to attend
 workshops and investigate teaching strategies that work best for them and
 their students. (helpful hints)

- I think every thing you listed is important to be a good instructor (na)
- It is more important to stress the need to help others rather than the money.
 (love teaching)
- Understaning the culture of the young adult is a very important concept. Their
 world is very different from the working world I entered. Knowing how and
 why they see things as they do can help us to help them transition to more
 professional and caring health care practitioners. (helpful hints)
- It is very difficult to make the decision to stay in education when technologists with little or no experience are making more money than I am. I like teaching, so I work a second part time job to pay the bills that my educational salary can't because it is below par. (love teaching)
- It was hard to pick just 5, I feel they were all important! (na)
- As a health care provider, teaching both for students in the clinical setting and patients was always a part of the career that I enjoyed. That is what led me to formal education. (love teaching)
- I will always be grateful for the excellent mentors who so generously shared their time and expertise with me. (thank yous)
- I felt very alone when I started as Director of Clinical Education. As I have developed I have mentored other individuals entering the profession both in and outside of this institution. (unclear)
- Just because you have PhD, does not mean you can teach! This is a biggest myth in academia. Also, having an advanced certification doesn't mean anything if you can't teach. Sometimes a teacher knows a lot about one concept, but very minimal about the other concepts that needed to be taught and covered well. I can see why some programs (such as PT), have so many faculty- they are all in their own world and area of speciality. While not a bad thing, students need a broad field of knowledge to prepare for entry level, then they can focus on an area of interst. (commentary)
- no (none)

- teaching is not for the faint of heart; this is hardest job I will ever do; learn
 everything about education and educational practices before attempting to
 teach; keep your clinical skills sharp (helpful hints)
- NO (none)
- I taught for years in the clinical setting so being a healthcare educator wasnt a new concept to me. The question prior to this one was tough...All of those qualities are very important. (na)
- Being given books and an office and told what you are to teach is not enough to train a new educator. All programs should give new instructors at least one semester with a mentor at their side through the first semster. (helpful hints)
- You really have to love to teach since salery is not a big motivating factor.
 You have to love your profession and contine with your education since your clinical skills may suffer if you don't keep up with current techniques. In education it is easy to get into a "rut" and do the minimal that is expected.
 You have to want to put out the best product (graduates) and stay motivated through their success. (helpful hints)
- When I started, I worried about everything. Over the last 22 years, I have become quite comfortable with my role. In the beginning, collegial support was crucial to me. My mentors really were instrumental in keeping me in this position. (thank yous)
- I do find that I, as faculty, go back to my nursing education for help in teaching. Why invent the wheel. I have used several techniques, attitudes, and activities that I was introduced to in my nursing education. (thank yous)
- None (none)
- The healthcare system I feel is going to hell fast. Poor preparation of highschool students to come into college level academics. No ethics/or proper behavior is taught in HS. No respect or dedication is taught. Also the management of Hospitals has changed. Educated idiots running the show, no people skills. All about numbers. (commentary)
- NO. (none)

- No (none)
- No (none)
- Being an adjunct faculty member prior to full-time was helpful. Starting fulltime in a small (one-person) department is challenging. (helpful hints)
- Be a good listener and be very patient. (helpful hints)
- It takes time and patience......you must continue your formal education and learn the language of education. (helpful hints)
- I had been employed in the educational department of the hospital as an
 educator in the Operating room and I would have continued in that role,
 however I found teaching in an academic setting more rewarding. Lisagood luck with your research. I was very impressed with your tool. I wish
 you the best and hope you have a substantial return rate on your survey.
 (love teaching)
- None (none)
- Currently I teach the lab sections. I made it through my first academic year! I
 am helping this college set up a MLS program. We are working with my
 previous employer to accomplish this. I hope they find a Program Director
 soon. (na)
- The students are great. The accreditation process is overwhelming and obtrusive and does very little to improve the quality of education in healthcare. Increased red-tape does not equal quality education. (love students)
- I love my students. (love students)
- My schooling required me to teach and test my peers which were very helpful in preparing me to teach. (helpful hints)
- If anyone ever loses their passion for teaching, they need to change careers.
 You cannot fake being an educator, there is too much at stake. (helpful hints)
- It was easy to transition to teaching a career that you loved and enjoyed.
 Difficult to leave the patients and their needs. You have to transfer your devotion & enthusiasm for the patients onto the students. (love teaching)

- Formalized training (graduate studies) has help tremendously with my
 confidence level (you find what you've been "doing" is correct!!...and you
 discover new instructional delivery methods that work!) and students are
 more likely to enjoy learning. (helpful hints)
- I'm not sure anyone can prepare you for the transition into teaching. I don't
 think anyone realizes the time and effort that goes into a quality experience
 for students. (commentary)
- My many years of clinical and management experiences prepared me well for the college educational environment(s). (helpful hints)
- I believe that private practice dental hygienists are educators for their patients already, so to transition to an educational institution is not as challenging for dental hygienists. (commentary)
- None (none)
- There always is the need of good mentors. (helpful hints)
- An excellent educator must be able to use a variety of technologies to meet
 the individual learning styles of the student. Further, there is limited or no
 support for typing so it is imperative to be proficient in Micro Soft Word and
 Excel. (helpful hints)
- students are not aware that education is a privilege they think education is a
 right and therefore an entitlement most lack any appreciation for the
 institution or the people trying to help them (commentary)
- I firmly believe that a strong background in clinical experience has been my best asset. (helpful hints)
- Mine has not been a good experience and I will not be renewing my annual 9-month contract. I am a certified FNP and will be returning to the clinical setting full-time as I miss being with patients. Also, I felt as though I was at a disadvantage without a degree in Education. There are just too many frustrations and stressors for too small a salary. This position does not allow for a healthy life balance. (commentary)
- None (none)

- I had some instinctive teaching abilities and had a BS degree in Elementary Ed. I taught in an LPN program before moving to an ADN program and that experience served me well. However, some faculty come into the position with neither experience or innate ability. They are good nursing practitioners, but need quite a bit of mentoring in the faculty role. Also, some Masters programs do not include courses in Curriculum design or Testing. I think new faculty are at a disadvantage when coming into teaching without those classes. (commentary)
- I had the luxury of knowing the curriculum from the program I'm now teaching in(I graduated from the program myself), as well as a good relationship with the program director. I also feel my ties in the community helped me transition into this role(know many of the professionals I now communicate with frequently as well as many of them that were mentors to me while I was in school, or working under and with some of them). (commentary)
- In my third year of teaching, I gave very serious thought to leaving my field and selling shoes. I felt like a complete failure. Fortunately, my current job opened up. The first years here were tough, but my colleagues were more supportive. Now I'm about to retire yet feel like I've just gotten a handle on this teaching thing! (commentary)
- I loved what I did before I came here to teach and I love what I do now. The satisfaction I receive when my students do well and succeed totally negates the decrease in salary. We definitely don't do it for the money. (love teaching)
- I was adjunct faculty for another program for two years with one course. This
 was a great way to "test the waters" before going into academics fulltime.
 (helpful hints)
- the only real frustration I find is all the "administration" paperwork to continously update and complete (disappointments)
- I believe my clinical experiences enhanced my instructional skills! I was also a patient several times...which better leads to ones understanding about how patients should be treated and cared for! (helpful hints)

- Much of the time we need to work hard at becoming good at everything we
 choose to do. Being dedicated to my profession, sharing my knowledge,
 truly wanting students to succeed so whey can be productive members of
 society makes my teaching experiences all worth it!! (helpful hints)
- I believe it helped to have tought part time previous to this full time teaching assignment. I appreciated having excellent experience as a manager and clinician to call upon while I learn more about being an educator. (helpful hints)
- Salaries of all and future teachers need to improve to bring in the best and brightest into the profession. (commentary)
- I believe my 25 years of practical experience contribute hugely to my success in the classroom. (helpful hints)

APPENDIX Y EMERGENT THEMES ASSOCIATED WITH THE CONCLUSIONARY COMMENTS MADE BY HEALTHCARE EDUCATORS

A total of 72 participant responses was recorded.

From the responses, a total of 72 themes was extracted, coded, and categorized as follows:

- Helpful hints 26 (36%)
- No additional comments 13 (18%)
- Love teaching/students 11 (15%)
- Commentary 10 (14%)
- Thank yous 3 (4%)
- Disappointments 2 (3%)
- Wishes 1 (1%)
- Those comments which were not understandable or not applicable 6 (8%)

VITA

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Mrs. Legg is presently a doctoral candidate in the Learning and Leadership program at the University of Tennessee at Chattanooga with hopes of graduating in August 2011. She looks forward to filling her 'free' time by spending it with family, especially her husband, Steven, and the four-legged Leggs, Lila and Oliver. She also intends to read a few non-educational books and enjoy traveling.