

# Three Key Components to Successfully Completing a Nursing Doctoral Program

Donald G. Smith, Jr., PhD, RN, and Barbara Delmore, PhD, RN

---

## abstract

Using their personal experience, the authors identify three key components to successfully completing a nursing doctoral program. The first component is asking the right questions to determine the doctoral degree best suited for the potential student. The second component is having a strategic plan that includes aspects such as financial considerations (research costs and potential financial support) and the development of a strong support system (specifically study pairs). The third component is the development of a systematic approach to completing the research, writing the dissertation, and completing the oral requirements. Addressing these areas will help students balance the many demands of doctoral study.

---

The development and application of new knowledge within the nursing profession requires a significant level of doctorally prepared nurses. However, with the current nursing shortage there is an increasing dearth of such nurses (American Association of Colleges of Nursing, 2000; Robb, 2005). The nursing profession needs doctorally prepared nurses who can educate the growing pool of potential nurses, replace the nurse leaders who are reaching the retirement age, and expand the number of qualified nurse researchers and clinical experts. Although the American Association of Colleges of Nursing (2004) reported a 5.6% increase in enrollment to nursing doctoral programs, they have identified that graduations for those programs were down 9.9% in 2003.

The most recent data indicate that 60% to 80% of students enrolled in doctoral studies never complete their programs (American Association of Colleges of Nursing, 2004; Association of American Universities, 1998; Berlin & Sechrist, 2002; University of Toronto, 2002). These statistics are significant when considering the future of the nursing profession. In addition, these statistics allude to the challenges faced by nursing doctoral students. This article identifies and recommends methodologies that could decrease the number of nursing students who leave and increase the number of doctorally prepared nurses required for our profession.

## BACKGROUND

There are approximately 93 nursing programs in the United States offering various types of doctoral degrees (American Association of Colleges of Nursing, 2004; Ketefian, Neves, & Gutiérrez, 2001; Ketefian & Redman, 2001; McEwen & Bechtel, 2000). The Teachers College at Columbia University started the first United States nursing doctoral program in 1924 and New York University became the second program to award a doctoral degree in nursing in 1941 (Murphy, 1981). Since that time, many nursing doctoral programs have been initiated and thousands of nurses have been awarded a doctoral degree (Ketefian et al., 2001). A slight increase in enrollment of nursing doctoral programs has been seen, but because most doctoral students never finish their program of study, the nursing profession faces a shortage of doctorally prepared nurses.

According to Gennaro, Mayberry, and DeGeest (2002), the mean age of nursing doctoral students is older (45 years) than those in other fields (33.8 years). Thus, a nurse with a doctoral degree has fewer years to contribute his or her knowledge to the profession. The American Association of Colleges of Nursing (2000) also came to this conclusion because they found that the time available for a productive career of doctorally prepared nurses has dramatically decreased.

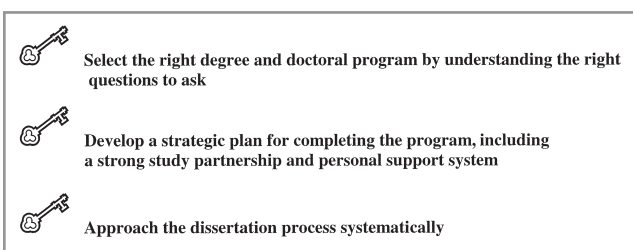
Because they have recently earned doctoral degrees in nursing, the authors understand the stresses and challenges of the program. Pursuing a doctorate is a major decision that should be made with careful deliberation and consultation. It is extremely important for current and potential nursing doctoral students to completely understand all aspects of obtaining a degree. Systematically approaching the completion of doctoral study would yield more working years to contribute in the profession.

Three key components to completing a doctoral program are determining the type of doctorate required or wanted, having a strategic plan for successful completion of doctoral studies, and creating a systematic approach for

---

*Dr. Smith is Assistant Professor, Hunter-Bellevue School of Nursing, New York, New York. Dr. Delmore is Nurse Case Manager, NYU Medical Center, New York, New York.*

*Address correspondence to Barbara Delmore, PhD, RN, Nurse Case Manager, NYU Medical Center, 560 1st Ave., Tisch 183, New York, NY 10016.*



**Figure.** Three key components to successfully completing a nursing doctoral program.

TABLE 2  
**KEY QUESTIONS TO ASK**

Personal Goals	Program Goals
1. Why do I want a doctoral degree?	1. What is the structure of the program?
2. Am I interested in a research or clinical degree? Am I interested in education?	2. What are the total requirements?
3. What are my career goals?	3. How long will it take to complete the program?
4. Which type of doctoral program will meet my personal educational goals?	4. How many students do not complete the program?
5. What is it like to be a doctoral student?	5. Is there a cap for the number of years required to complete the degree (e.g., 7 years)?

completion of the written and oral requirements of the program (Figure). All nurses considering enrollment in a doctoral program would benefit from recommendations on how to successfully progress through the program (Edwardson, 2004; desJardins, 1994). The authors will discuss their doctoral program experiences and suggest recommendations for increasing the probability of success for future nursing doctoral students.

### SELECTING THE RIGHT DOCTORATE PROGRAM

To obtain a degree successfully, potential doctoral students need to understand the genesis of the doctoral quest. Determining the reason for pursuing a degree is the catalyst to selecting a specific program and degree that is appropriate for the doctoral candidate's chosen career goals. In addition, finding the program that matches the student's goals is an important factor in successful degree completion.

Of all of the nursing doctoral degrees, the Doctorate of Philosophy (PhD) is the most frequently awarded at 80% (Ketefian et al., 2001; National Center for Educational Statistics, 2003). Although not an exclusive criterion and dependent on the school's mission and phi-

TABLE 1  
**TYPES OF DOCTORAL DEGREES**

Degree	Goal of Degree
PhD (Doctorate of Philosophy)	Research, public policy, administrative roles
EdD/DEd (Doctorate of Education)	Education, administrative
DNS/DNSc (Doctorate of Nursing Science)	Clinical practice and research
ND (Doctorate of Nursing)	Clinical practice
DNP (Doctorate of Nursing Practice)	Advanced nursing practice

losophy, the PhD tends to be associated with research and academic goals. The American Association of Colleges of Nursing described the PhD (2001) as a degree that prepares a graduate specializing in new knowledge development.

If research is not a strong interest for obtaining a doctorate but advancing clinical practice is, the potential student may want to investigate enrollment in a clinical degree program such as the Doctorate of Nursing Science, the Nursing Doctorate, or the new Doctorate in Nursing Practice (Edwardson, 2004; Ketefian et al., 2001; McEwen & Bechtel, 2000; Parse, 2005; Pastor, Cimiotti, & Stone, 2004). A Doctorate of Education may be more appropriate for those seeking career goals within educational settings. Table 1 outlines the various degrees and their intended goals.

Once the potential student understands the academic goals of each program, there are questions that need to be answered. Table 2 displays some of the questions a prospective doctoral student should ask concerning his or her goals and those of the doctoral program. Answering these questions is important for a positive outcome in a doctoral program and the questions are best asked before enrolling in a program.

With different types of nursing doctorates, it is important to find synergistic interests between the potential student and the program. Determining the school's philosophy about how it prepares its graduates is important for the future doctoral student to know (Golde, 2001). In addition, finding out the reason other students do not complete that particular program might provide insight. The potential student should start speaking with his or her peers about their experiences in doctoral programs. Asking other doctorally prepared nurses can supply the potential student with a wealth of information and advice to consider during the decision process.

With today's technology, most institutions provide detailed information about their programs on the Inter-

TABLE 3  
**FINANCIAL AID AND DISSERTATION RESEARCH FUNDING WEB SITES**

Organization	Web Site
Financial aid web sites	
Medi-Smart: Nursing Education Resources	<a href="http://www.medi-smart.com/finaid.htm">http://www.medi-smart.com/finaid.htm</a>
United States of America Department of Education	<a href="http://studentaid.ed.gov/students/publications/lsa/index.html">http://studentaid.ed.gov/students/publications/lsa/index.html</a>
Dissertation research funding web sites	
American Association of Critical Care Nurses	<a href="http://www.aacn.org">http://www.aacn.org</a>
Association of Nurses in AIDS Care	<a href="http://www.anacnet.org">http://www.anacnet.org</a>
American Association for the History of Nursing	<a href="http://www.aahn.org">http://www.aahn.org</a>
Sigma Theta Tau International	<a href="http://www.nursingsociety.org">http://www.nursingsociety.org</a>
Midwest Nursing Research Society	<a href="http://www.mnrs.org">http://www.mnrs.org</a>
Southern Nursing Research Society	<a href="http://www.snrs.org">http://www.snrs.org</a>
National Institutes of Health (NIH)	<a href="http://www.nih.gov">http://www.nih.gov</a>
American Nurses Foundation (ANF)	<a href="http://www.nursingworld.org/anf">http://www.nursingworld.org/anf</a>

net, so this should be one of the first places a potential student looks. There are also published guidelines that provide a step-by-step process to assist in the proper pairing of students and doctoral programs (Jones & Lutz, 1999; O'Connell, 2003; Robb, 2005).

### DEVELOPING A PLAN FOR SUCCESSFUL PROGRAM COMPLETION

Another component to earning a doctoral degree is evaluating and planning for all aspects of program completion before enrollment. Three elements of a strategic plan for completing a doctoral program are reviewing all financial aspects available, developing personal support systems, and developing a plan for maintaining motivation throughout the years of study.

#### Financial Aid

Financial support will be important to most students, so it is imperative to identify early in the process all possible scholarships, fellowships, and financial aid. There are many sources for possible financial aid and scholarships.

The federal government is the first place potential students should look for financial aid. The Health Resources Services Administration is a main source of financial information and educational grant funding. The National League for Nursing (1997) has published the pamphlet, "Scholarships and Loans for Nursing Education 1997-1998" and, although not as current as other documents, it is an excellent place for potential students to begin their search for financial assistance. The Internet also has many resources for review (Table 3). Additional sources for support are the "Annual Register of Grant Support," "The Chronicle of Higher Education," and "Foundation Grants to Individuals" (National League

for Nursing, 1997). Many healthcare facilities provide educational funding, reimbursement, or remission, and they are equally excellent sources for nurses seeking high levels of financial aid.

The Health Resources Services Administration has provided grant funding to nursing schools as part of the federal government's efforts to increase the supply of registered nurses (Health Resources Services Administration, Bureau of Health Professionals, 2006). Although most of their grant funding is focused toward basic nursing education, they also provide information about grants for doctoral students seeking to become nursing faculty. Many nursing schools have applied for and received grants from the Health Resources Services Administration and now have the opportunity to offer some financial support for nursing students. The potential student needs to investigate all avenues for federal funding and the availability of grants and scholarships each school has to offer.

The authors' school offered part-time doctoral students a unique two-for-one scholarship. If a part-time student took two courses and paid for one, the school provided scholarship money for the second course. In addition, the potential student will want to identify specific funding given due to individual uniqueness, such as GI Bill funding for veterans, minority fellowship programs, and other special funding opportunities. Unique and creative funding programs similar to those listed above have been successful in assisting students to afford a doctoral degree.

#### Funding for Dissertation Research

Before enrolling in a program, students may not recognize the costs that may be incurred while completing data

collection. Potential costs such as duplicating surveys, postage, or expenses to interview subjects can become burdensome, particularly when the research requires large samples. Once an area of research is determined, the student should identify organizations that offer research grants or support. Both authors devoted time to identifying foundations and subsequently submitting grant applications to support their doctoral research. Although this endeavor in addition to a large course load can be overwhelming, the funding received can relieve much of the financial burden. Many specialty nursing organizations target student research for support. Table 3 lists some of the organizations that offer student grants for funding dissertations. Students are encouraged to apply for funding because it provides needed financial assistance. More importantly, it provides students with their first funded study, which will become significant when trying to obtain future grants.

### **Developing a Personal Support System**

The second important part in developing a plan for successful completion is evaluating personal support systems. Although doctoral study is an individual pursuit, a strong support system will increase the likelihood of success in this educational endeavor (Azuma, 2003). A personal support system is an overarching concept, but the concept itself has three components: family and significant other support, study groups, and study pairs.

Although personal support systems are only one aspect of the process, they are so crucial throughout the entire process that they pervade all three components at some point. The importance of personal support systems is echoed in Heinrich's (2001) work and worth reading. Academic experiences that are supported by family and significant others, faculty, or fellow students yield more positive feelings and outcomes.

The support of family and significant others is imperative. Thoroughly explaining the requirements of doctoral study work to significant others before enrollment will help keep family life tolerable, if not happy. Keep in mind, however, that the beginning student has difficulty conceiving the considerable participation that is involved in doctoral work. It is only by going through the process that the enormity of the commitment truly takes shape. School and family priorities require constant balancing throughout the process. Therefore, frequent inventory checks are required to maintain relationships and support systems, if not sanity.

Developing a peer support system with other students, forming retreats, creating study groups, or just studying with a peer will increase the possibility of completing the program. Study groups are a common means of peer support throughout graduate programs, yet they

are one aspect not frequently discussed in nursing literature. The authors' experience included being involved in a peer study group of between five and eight doctoral students who worked on the same study timeline during their coursework. This peer study group started with one course, but with its success the members decided to continue the group over several courses. The group met at least once a month and each member would share his or her ideas for papers, presentations, and required oral defenses, or they would swap assignments for peer critique before submission to the course professors.

All of the groups' participants reported that the study group not only assisted in the preparation of higher quality papers, but also increased their knowledge and confidence. More importantly, all felt that the peer pressure helped to keep them on track for progressing throughout the program. The significant effects of this group and its affect on progression toward earning a degree were clearly supported. Once the course work was completed, the group disbanded and only four of the eight students have successfully graduated at this time. The four remaining students have progressed more slowly, working through the additional requirements of the doctoral degree.

When the study group disbanded, the authors recognized the need to have a continual support system along with some peer pressure to complete the program. Despite the fact that their research requirements differed dramatically (quantitative versus qualitative), pairing up after the dispersal of the larger peer study group was significant to both in the completion of their degrees. A goal was set to meet frequently and review each other's dissertations and encourage each other to meet the specific departmental goals of proposal review, dissertation submission, and final oral review. In a friendly, competitive fashion, the authors worked together to ensure completion of each other's research. This process included writing the dissertation manuscript on a schedule, ensuring committee reviews were finished, and filling out the paperwork involved for completion. The authors found that they were at different stages of the process at different times, but the goal was to help each other achieve the degree. This study pairing was the secret to keeping motivated and providing immediate feedback for the study work.

Doctoral study is often viewed as a solo process, but in reality dissertation success is accomplished through a supportive committee, peers, and family. The authors identified that neither would have completed the process in the ambitious timeframe set without this team approach to studying. Potential students can find additional information from various books that provide insight on how to survive the doctoral program (Bolker, 1998; Golde, 2001; Kerlin, 1995a; Sternberg, 1981).

## **Maintaining Motivation**

Staying motivated and seeking peer support are extremely important and go hand-in-hand with doctoral study. By the time doctoral students get into the heart of their study, it is frequently reported that they can experience anxiety, boredom, and insecurity. Sternberg (1981) refers to a “dissertation wave,” which identifies peaks and valleys in a student’s emotions during doctoral study. Although family and significant other support is always important throughout this process, another student is the perfect sympathetic ear to help the student through the highs and lows of doctoral study.

The study pair is exceptional for support during this phase because both participants will most likely experience these feelings at different times and need the understanding and support from the other to overcome these periods. There are common thoughts and feelings that can immobilize students (e.g., disappointment in the chosen topic, the time it takes to complete the dissertation, and periodic lapses in self-esteem). In addition, students often find themselves without a “road map” to the doctoral process. This lack of clear direction sometimes experienced by students is frustrating as they receive confounding directions to what should occur next in the process or how it should be done. Participating in a study pair can provide the structure and support needed to work through those feelings.

To effectively use the concept of a study pair, it is recommended that students develop a strong structure for meeting regularly, such as a biweekly or monthly schedule. In addition, the students should commit to coming prepared for each study session by setting topics to discuss or questions to ask each other in advance. The most helpful planned activity for the authors was sending each other their written work for review and critique before the scheduled meeting. E-mailing each other every time there is a thought or question is invaluable. This activity meets the doctoral student’s need for immediate answers and gratification. Constant communication is important to keep students motivated and on track. Developing mutually set goals for accomplishing each of the stages of the doctoral program or the written dissertation will help the pair to stay on track.

Having these meetings in a non-typical “study environment” is one way to ease the tedium that can accompany the work of studying. The authors used each other’s homes as meeting places and often met at a local restaurant for a “working dinner” before the dinner rush. These treats allowed for relaxation while reaching mutual goals.

Avoiding “student blues” has been identified as important to continued success in the program (Stanford School of Medicine, 1997). It is highly recommended that students occasionally do something fun and rewarding without feeling guilty. Study pairs are more apt to be

diligent about reminding each other when it is time for praise than the individual student can be.

## **A SYSTEMATIC APPROACH TO COMPLETE THE WRITTEN AND ORAL REQUIREMENTS**

Doctoral study is separated into three sections: the course work, the research, and the dissertation writing (University of Queensland, Australia, 2003). These segments parallel the three crucial testing items required by most programs: candidacy examination, proposal review, and oral defense. Each has its own stresses, and the study pair can be a significant resource at each of these stages (Johnson & Burnard, 2002). Given the doctoral program requirements, it is important for the student to have an understanding of the two crucial elements that should be in place, a strong dissertation committee and an understanding of starting and completing the dissertation.

### **Working With the Dissertation Committee**

Selecting and working with a committee is the first step toward success. There are several thoughts on how to select the best committee. Committee members help the student develop and complete the dissertation from its inception to its completion. Therefore, students should consider selecting a professor whose knowledge can supplement their knowledge gaps or who is most aligned with their thoughts and theories. Gennaro et al. (2002) stated there should be a “close fit” between the research interests of the faculty member and the student for an efficient and effective relationship that yields success. More importantly, students should select a professor they know they can work well with during a long process. Doctoral students learn they are the experts in their research subject, but the committee members are the experts in the process.

Committee members will review the working dissertation and most likely recommend multiple changes before the final paper is submitted. Learning how to process those recommendations is important. The student will often want to disagree and not make the changes. However, the student needs to remember that the committee has been through this process before and knows what belongs in the paper. As in life, the student needs to learn to pick his or her battles. The student should continually ask himself or herself, “What is the easiest way to move on and complete the dissertation?” Continuing to argue the point may be meaningless. A typical example is a student who fought to keep a sentence that the committee felt was not necessary. Although the student won the battle, a year later he realized the committee was right—the sentence made no sense in the context of the paragraph. Wisely, most students will choose to make the changes and move on, a decision that will put them

closer to the end. Completing a dissertation is more than an academic exercise—it is a process.

### Composing, Writing, Reviewing, and Revising

The thought of writing a doctoral dissertation is overwhelming and, once it is started, it can seem an insurmountable task. Strong personal support such as the study pair can be the means for students to overcome these feelings. In addition, breaking down the dissertation into small sections and setting goals for completing each section makes the process seem more achievable (Kerlin, 1995b). It is not necessary to write each section or chapter in the proper order. Often, students will write the section that they feel most comfortable with first. This step helps students ease into the more difficult sections and maintain motivation.

Peer review is critical during this period because the process not only works toward improvement, but also provides a method of support. The authors found that when one person thought something was terrible, the other was more objective and identified the positive. Constant sharing of a student's working dissertation with a study pair provides feedback from someone who knows the student's research yet is non-threatening. Sometimes the students will find themselves writing only a few sentences, whereas at other times writing seems easier. Constant paper revisions will take care of the unnecessary overwriting. A dissertation is finished one page at a time.

Students should expect and accept the need to go through multiple drafts before the dissertation committee approves the final paper. Because each student will go through numerous versions of the paper, it is important to have a good system for identifying the most current version. Computers and available software programs make the writing of a dissertation much easier and are a requirement for all doctoral students. Software programs such as EndNote (Thomson ResearchSoft, Carlsbad, CA) and American Psychological Association templates can be extremely helpful but are more an individual's choice than a required program, so each method should be considered and tried before buying such an expensive program.

Computers, although advanced and time-saving, are not always reliable. Having a study partner maintain a current back-up copy of the other partner's work will reduce periods of total panic and utter despair when files become corrupt or computers crash. Although it is essential to make sure back-up copies are made, it is also recommended that the student frequently send a copy to a friend to save on his or her computer. Every student will need this copy at some time during the process and even possibly at the end. For example, one of the author's computers crashed, destroying 2 years of work format-

---

## key points

### Nursing Doctoral Programs

Smith, D. G., Jr., Delmore, B. (2007). **Three Key Components to Successfully Completing a Nursing Doctoral Program.** *The Journal of Continuing Education in Nursing*, 38(2), 76-82.

- 1 Selecting the doctoral program that meets the student's personal and career goals is crucial to successfully earning a nursing doctoral degree.
- 2 A strong strategic plan that includes financial and emotional support systems and sets small, achievable goals throughout the process increases the likelihood of completion of a nursing doctoral program.
- 3 Pairing with another doctoral student who understands and is going through the same process will help the student stay motivated during all stages of the program.

---

ting the paper and gathering information. Fortunately, the other study pair member had a saved copy, relieving much of the anguish felt by the author and decreasing the work required to recreate the extensive dissertation.

### Manuscript Writing Style

Most nursing doctoral programs require students' dissertations to be in the American Psychological Association's format. Each student must be thoroughly knowledgeable about the American Psychological Association's writing style (American Psychological Association, 2001). A smart investment is to purchase the latest copy of the style manual and refer to it often. A dissertation is the product of a challenging study period and must be perfect. A committee member or a reader often challenges students on their writing style. The challenge is frustrating at times for the student; however, the student needs to realize that early effort will pay off in the end when it is time to publish the dissertation through the University of Michigan. An objective eye, such as that of a study partner, will be able to identify formatting and style issues that can no longer be seen by the student after multiple writings and reviews. Independent eyes are needed frequently to provide accurate feedback.

### CONCLUSION

Pursuit of doctoral study is an important part of nursing and a requirement for the nursing profession to continue. Nurses who have already obtained their doctoral degrees are obligated to mentor those nurses interested in doctoral study.

To successfully complete a nursing doctoral program,

each potential student should have a thorough understanding of the three key components for successful completion of a doctoral program identified in this article. Future students need to (1) select the correct program for themselves by asking the right questions before undertaking doctoral study; (2) develop a strategic plan for completing the program, which includes addressing financial issues and identifying a significant personal support system of family, friends, and a strong study partnership with another doctoral student; and (3) develop a systematic approach for collecting data, writing the dissertation, and completing the oral requirements. Past student experiences have demonstrated that the best way to ensure successful completion of a doctoral program is implementation of study pairs and following the identified keys to success.

## REFERENCES

- American Association of Colleges of Nursing. (2000). *1999-2000 salaries of instructional and administrative nursing faculty in baccalaureate and graduate programs in nursing*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2001). *AACN position statement: Indicators of quality on research-focused doctoral programs in nursing*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2004). *2004-2005 enrollment and graduations in baccalaureate and graduate programs in nursing*. Washington, DC: Author.
- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.
- Association of American Universities. (1998, October). *Association of American Universities Committee on Graduate Education: Report and recommendations*. Retrieved April 17, 2005, from <http://www.aau.edu/reports/GradEdRpt.html>.
- Azuma, R. T. (2003). *So long, and thanks for the Ph.D.! a.k.a. everything I wanted to know about C. S. Graduate School at the beginning but didn't learn until later*. Retrieved April 17, 2005, from <http://www.cs.unc.edu/~azuma/hitch4.html>.
- Berlin, L. E., & Sechrist, K. R. (2002). The shortage of doctorally prepared nursing faculty: A dire situation. *Nursing Outlook*, 50, 50-56.
- Bolker, J. (1998). *Writing your dissertation in fifteen minutes a day: A guide to starting, revising and finishing your doctoral thesis*. New York: Henry Holt and Company.
- desJardins, M. (1994, March). *Before you start*. Retrieved April 17, 2005, from <http://www.cs.indiana.edu/how.2b/how.2b.before.html>.
- Edwardson, S. R. (2004). Matching standards and needs in doctoral education in nursing. *Journal of Professional Nursing*, 20, 40-46.
- Gennaro, S., Mayberry, L., & DeGeest, S. (2002). Doctoral education internationally: Questions for the 21st century. *Texts & Contexts Enfermagem*, 11, 31-35.
- Golde, C. M. (2001). *Questions to ask when thinking about pursuing a PhD*. Retrieved April 17, 2005, from <http://www.phd-survey.org/advice/advice.htm>.
- Health Resources Services Administration, Bureau of Health Professions. (2006). *Funding opportunities*. Retrieved February 9, 2007, from <http://bhpr.hrsa.gov/grants/default.htm>.
- Heinrich, K. T. (2001). Doctoral women as passionate scholars: An exploratory inquiry of passionate dissertation scholarship. *ANS: Advances in Nursing Science*, 23, 88-103.
- Jones, K. D., & Lutz, K. F. (1999). Selecting doctoral programs in nursing: Resources for students and faculty. *Journal of Professional Nursing*, 15, 245-252.
- Johnson, M., & Burnard, P. (2002). The 'pear-shaped' doctoral thesis and how to avoid it! *Nurse Education Today*, 22, 355-357.
- Kerlin, S. P. (1995a, November 8). Pursuit of the Ph.D.: "Survival of the fittest," or is it time for a new approach? *Education Policy Analysis Archives*, 3, Article 16. Retrieved April 17, 2005, from <http://olam.ed.asu.edu/epaa/v3n16.html>.
- Kerlin, S. P. (1995b, November 8). Surviving the doctoral years: Critical perspectives. *Education Policy Analysis Archives*, 3, Article 17. Retrieved April 17, 2005, from <http://olam.ed.asu.edu/epaa/v3n17.html>.
- Ketefian, S., Neves, E. P., & Gutiérrez, M. G. (2001, May 31). Nursing doctoral education in the Americas. *Online Journal of Issues in Nursing*, 5(2), Article 8. Retrieved April 17, 2005, from [http://www.nursingworld.org/ojin/topic12/tpc12\\_8.htm](http://www.nursingworld.org/ojin/topic12/tpc12_8.htm).
- Ketefian, S., & Redman, R. W. (2001). Global perspectives on graduate nursing education: Opportunities and challenges. In N. Chaska (Ed.), *The nursing profession: Tomorrow and beyond* (pp. 219-231). Thousand Oaks, CA: SAGE Publications.
- McEwen, M., & Bechtel, G. A. (2000). Characteristics of nursing doctoral programs in the United States. *Journal of Professional Nursing*, 16, 282-292.
- Murphy, J. F. (1981). Doctoral education in, of, and for nursing: An historical analysis. *Nursing Outlook*, 29, 645-649.
- National Center for Educational Statistics. (2003). Retrieved April 17, 2005, from <http://nces.ed.gov>.
- National League for Nursing. (2002). *Scholarships and loans for nursing education, 1997-1998*. New York: Author.
- O'Connell, K. A. (2003). Is a doctorate in your future? *Imprint*, 50(2), 45-48.
- Parse, R. R. (2005). Choosing a doctoral program in nursing: What to consider. *Nursing Science Quarterly*, 18, 5.
- Pastor, D. K., Cimiotti, J. P., & Stone, P. W. (2004). Doctoral preparation in nursing: What are the options? *Applied Nursing Research*, 17, 137-139.
- Robb, W. J. (2005). PhD, DNSc, ND: The ABCs of nursing doctoral degrees. *Dimensions of Critical Care Nursing*, 24, 89-96.
- Stanford School of Medicine. (1997). *Graduate school survival guide*. Retrieved February 9, 2007, from <http://sll.stanford.edu/projects/tomprof/newtomprof/postings/116.html>.
- Sternberg, D. (1981). *How to complete and survive a doctoral dissertation*. New York: St. Martin's Press.
- University of Queensland, Australia. (2003). *Ph.D. dissertation development stages*. Retrieved February 9, 2007, from <http://www.sss.uq.edu.au/linkto/phdwriting>.
- University of Toronto. (2002). *Report indicators for governance: Annual report, September 2002*. Retrieved February 9, 2007, from [http://www.provost.utoronto.ca/userfiles/page\\_attachments/Library/6/2513840\\_pi2002.pdf](http://www.provost.utoronto.ca/userfiles/page_attachments/Library/6/2513840_pi2002.pdf).