Six Major Reasons Why Graduate Students Don't Finish

by Wendy Y. Carter, Ph.D.

Completion of graduate school is a challenge. Students have the motivation and personal qualities to succeed. Professors provide encouragement and guidance to the students who have chosen to study with them. Even when colleges admit the best and brightest, there are still a number of students who do not complete the process. Although students apply to graduate school expecting to complete their degree within a reasonable period of time, there are often intervening circumstances that cause them to leave before completing all requirements. Why, then do so many students fail to finish their degree? Some reasons are unavoidable such as medical reasons, family needs, etc. However, for the student that wants to finish and has no intervening circumstances, it would certainly be a tragedy if they were to fail to complete the degree.

When students fail to complete their graduate degree requirements, it is a loss, not only for the student, but also for the college or university, the department, and the potential employers who might miss the opportunity to have a highly qualified applicant for specialized jobs. This summary provides an overview of the more extensive findings on college attrition and some possible solutions. While this report focuses primarily on doctoral candidates many of the findings also apply to student working on their Master degree especially those who are required to write a thesis.

National Attrition rates

The national attrition rate across disciplines has averaged around 50 percent. Some departments' attrition rates are even higher (Nelson & Lovitts, 2001; Kang, 2004; Lovitts, 1996). Lovitts (2001) in her study of 816 graduate students at two distinguished research universities, one a private institution in a large urban center, the other a public university in a rural setting, identified a 33% attrition rate at the rural university and a 68% attrition rate at the urban university. Lovitts' study included students from nine different departments and concluded that "attrition is not discipline specific."

Some research deals with where in the process students are more likely to drop out. According to Beckett (2002), two-thirds of attrition occurs in the second or third year of a Ph.D. program. Another 20% of students depart after the sixth year, leaving only minimal attrition in year one and between years three and six.

Some interesting facts have emerged in the attrition research and include the following:

• The number of Americans earning Ph.D.'s compared to foreign students has dropped more than 8% in the last 5 years (Smallwood, 2004)

- Women drop out at a higher rate than men (Smallwood, 2004; Lovitts & Nelson, 2000)
- Minority students leave at a higher rate than white students (Smallwood, 2004).

• Students with less than a 3.0 GPA were just as likely to drop out as those with a higher GPA (Ph.D. Paths at UW-An Update, 2001).

• Students in the humanities and social sciences programs drop out at a higher rate than those in the sciences (Smallwood, 2004; Lovitts & Nelson, 2000)

In law schools and medical schools attrition rates are the lowest and hover around 10 percent (Jacobson, 2002). The lower attrition rates attributed to law and medical school may be attributed in part to the fact that "they lack the major challenge of the Ph.D. dissertation". Also their requirements, expectations,

performance feedback, and structures for integration are so much stronger (Lovitts & Nelson, 2000).

While dropping out of graduate school is preferably better in the earlier stages, Bowen and Rudenstine (1992) find a disturbing trend in students who never earn their Ph.D. despite having progressed to the ABD (All But Dissertation) stage. The length of time spent in the ABD stage and percentage that never complete their dissertation has increased. These authors concluded that the time between the end of the formal coursework and the selection of the dissertation topic has become an unusually difficult period for graduate students (Bowen & Rudenstine, 1992).

Requirements for degree completion

What does it take to complete a degree? Several researchers have examined this issue. The average time it takes to complete the degree hinges on a number of factors. Using regression analysis, Pinson (1998) found four significant predictors of time to degree (TTD): (1) how dissertation writing time was scheduled, (2) computer skills at the beginning of the dissertation, (3) perceived difficulties caused by job demands, and (4) changes in advisor or committee membership. Moreover Pinson found that situational factors related to employment and employment-related activities slowed time to completion (Pinson, 1998).

Structure and the incredible amount of independence after completion of the coursework are some of the critical factors in successful or timely completion of the degree requirements. Ramos (1994) examined 12 ABD doctoral candidates in the School of Education at the University of Kansas in order to understand factors that influenced their lack of degree completion. He found that structure, or lack of it, was especially critical during the "post-comprehensive" period of doctoral study when many students were basically "on their own" in making progress toward degree completion (desJardin, 1994)

Unlike professional graduate programs such as law, medicine, and business, doctoral programs have been characterized by less structure and are organized less like the undergraduate experience. The degree of structure in an academic program varies by institution and academic department. In general, the doctoral process can be described as a three-part process; the first two stages that are considered pre-dissertation phases. The first stage involves advance level course work that can last two to three years.

The second stage involves fulfillment of the department requirements, which could include qualifying/preliminary written, and/or oral exams and acceptance of a dissertation proposal. Some universities have a rigorous and exhaustive defense of the dissertation proposal at this stage instead of a defense of the finished dissertation as described in stage three. After this stage is successfully completed the student has advanced to doctoral candidacy. The student is what is commonly known as "ABD" all but dissertation. The third stage (ABD phase) involves research and writing and defense of the dissertation. Both faculty and students generally understand these stages to be artificially constructed, without clear and distinct beginning or ending points.

In the Role and the Nature of the Doctoral Dissertation, the Council of Graduate School defines the terms often associated with a thesis and dissertation. These include terms repeatedly mentioned such as "intensive," "substantial," "significant," "original," and "independent." "Intensity" refers to the research needed for the final written product. "Substantial" may be taken to mean that research is not short-term but rather has substance and depth. "Significant" refers to the impact of the research project chosen on the contribution to the field. "Original" is taken to mean that the research is the student's own ideas. "Independent" implies that the work was done by the student and only by the student.

Success in graduate school often depends on a successful mentoring relationship between the faculty advisor and the student. Women face an additional disadvantage. The fact that the majority of graduate faculty are predominately male and since both men and women faculty tend to be more supportive of

students of the same sex contributes to the increase rate of attrition among women graduate students (Day, 2001).

There is clearly a mixture of tasks to be completed as well as personal qualities that may contribute to completion of a graduate degree. A variety of experiences along the way may cause a student to drop out but many of these things may be manageable or preventable. Looking at the reasons why students have dropped out may yield information on what might be done to help graduate students complete all requirements and feel competent while doing so.

Research on Reasons for Dropping Out

When examining the reasons why graduate students leave school before completing their degree, the prevailing research suggests that the decision to leave is based on a variety of factors. Many agree that prior to entering graduate school; graduate students do not fully understand how the process of graduate school works or how to effectively navigate the process. The process of completing a Master's Thesis or doctoral dissertation can be isolating, intolerable, and unpleasant even for the best and the brightest students. The decision to leave graduate school is complex and fraught with anxiety and sometimes regret.

Although for each candidate the factors will vary, the prevailing research in this field suggests that there are 6 main reasons why graduate students fail to complete the degree. Further some who do finish take an inordinately long time to complete their thesis or dissertation. This report explores the research on the following six major areas that cause graduate students not to finish their thesis or dissertation:

(1) Funding
(2) Time
(3) Departmental Culture
(4) Inadequate Advising
(5) Quality of Life
(6) Research and Writing

1. FUNDING

There are many reasons for pursuing a graduate degree. Higher pay is one of them. Research shows that PhD. salaries are higher than masters' and bachelors' salaries respectively (Azuma, 1999). According to a recent report from the Census Bureau (2002), more education translates to higher earnings. People with doctoral degrees have the highest earnings (Kerlin, 1995). However, the potential for increased salary in a given field must be measured against the cost of income lost by staying in school longer and the amount of debt incurred to secure the desired degree.

Lack of adequate funding is one of the top reasons some graduate students give for not completing their degree. Securing funding or financial aid for graduate school is quite different than it was for undergraduate school. As an undergraduate, financial aid is based on the financial need of the student. However, funding for graduate school is sometimes awarded based on a variety of other mechanisms.

The budget for students in graduate school includes tuition, fees, and stipend for living expenses. In addition to the financial cost of maintaining a living and completing the program, the unexpected expenses related to completing the project often lead candidates to leave programs early and in debt. To offset some of the related expenses students are forced to make some rather problematic choices: (1) some fellowship recipients violate institutional regulations by taking outside jobs to supplement the fellowship stipends and (2) other students take time off to work regular jobs in between earning the degree thus lengthening the time required to complete the degree, which in turn increases the possibility of not finishing (Jones, 2002).

The National Center for Education Statistics (NCES) found that in 1999-2000, 37% of master's degree students and 51% of doctoral students receive some type of grant to fund their education (NCES, 2002). To persist through until the end most students must secure a variety of funding after the initial funded year of graduate school. The uncertainty of future funding and the competition for those scarce resources may distract students and add to the stress of completing the degree on time.

The type of funding received may make a difference. Specifically, the variety of awards range from fellowships (outright stipends that do not involve any work obligations) to traineeships, teaching assistantships, and research assistantships that involve pay in exchange for work. According to the National Research Council (NCR) Summary 1987 Report, students with the shortest time-to-degree (TTD) generally had some type of funding in the form of fellowships, traineeships, or research assistantships. Those with teaching assistantships and other forms of funding such as loans took longer to complete their degree.

In addition to tuition, the cost of the thesis or dissertation portion of the degree can be surprisingly expensive. Computer equipment and copy costs can be thousands of dollars alone. It would be desirable to provide a method for graduate student to budget appropriately for the research and writing portions of their degree.

2. TIME

Another key finding focuses on time-to-degree (TTD): the amount of time that students take to complete their degree. A number of studies (Bowen, Lord, and Sosa, 1991; Bowen and Rudenstine, 1992) document a disturbing trend that the length of time it takes to earn a doctorate in the United States has increased dramatically over the last 20 years. While there is disagreement about the size of the increase the reports confirm a growing trend in a positive direction.

Although TTD data on master's degrees are not reported at the national level, a recent report from the Graduate School at the University of Washington indicates that there is a similar TTD pattern between master's students and doctoral students. The researcher found less variation across demographic variables than across disciplines. Moreover, they found that the thesis requirement was an "important determinant of time-to-degree." Students in non-thesis programs took a shorter amount to finish (Shea, 2004).

These two findings together; low completion rates and increased time-to-degree, suggest that the returns to investment—student's investment time relative to the time to degree conferred—is not promising. The amount of time needed to complete a doctorate is a key concern for those pursuing the degree. Moreover, the current trends have a negative impact on students, their respective institution, national public agencies, and private organizations.

The time to degree is likely to be affected by the graduate program requirements, economic restraints, labor market opportunities, department culture, and individual preferences. The total financial costs to students and institutions positively increase as the TTD increases and often contribute to higher attrition rates.

Because no one can tell you how long a thesis or dissertation will take, graduate students need to be able to set and meet their own deadlines. Students must ask themselves, when do I need to be finished and why, or the process can drag on for years or will be abandoned altogether.

Clearly, then, time management is a significant factor in completing a graduate program and, more specifically, a writing project. It would be desirable to have a systematic method that assists a graduate student in identifying, organizing and planning when each step of the project is to be completed and motivating the student to complete the steps at the planned time.

3. DEPARTMENTAL CULTURE

The department culture is the traditional patterns, norms, values, beliefs and behaviors that are passed down to new faculty and students alike. The culture is transmitted through the apprenticeship model that differentiates traditional graduate school programs from the professional schools. Graduate students are further indoctrinated into the department's culture by the written rules in the graduate student handbook, the application and interpretation of these rules, and the unwritten and hidden rules that students must figure out by trial and error.

The sooner these unspoken rules are learned, the sooner the student is able to adjust his or her behavior. For example, the student must learn the extent to which attendance at the department social functions are truly "voluntary". In addition to deciphering the code, students must also be cognizant of what is going on in the department and know the right questions to ask. Since finding a good advisor is critical to success; a student should be aware of matters like who on the faculty is scheduled to leave the university or going on sabbatical. The department's politics might hinder a student's progress despite the student's intellectual ability to finish in a timely matter.

Research shows that there is very little difference between students as far as grades and GRE scores. Most graduate students have excelled as undergraduates. However, they are unprepared for the culture of graduate school, namely the undirected unstructured aspect of completing the thesis or dissertation.

Some researchers describe the doctoral process as a survival process. Kerlin (1995) suggests that most students describe the process as more "political" than intellectual in nature; the degree goes to those with the most stamina and maturity to endure a kind of "hazing process" in which the rules of conformity and compliance had never been made explicit ahead of time. According to Kerlin (1995, p.3) the rules of the department are sometimes inexplicit, unarticulated, arbitrarily and capriciously applied and can be described at best as "part of the department's way of doing things." The author further states that when students get to school they must learn and familiarize themselves with the culture of the department and adjust their behaviors accordingly.

It would be desirable to have a systematic guide that assists a graduate student avoiding the common mistakes made by students in graduate school. Also, this guide might address myriad issues that deal with how to schedule the defense, what is to be expected, and how to prepare for the defense. The method may also include instructions about depositing an academic writing project. These instructions would addresses the issues surrounding identifying obstacles in the process, including assessing enrollment requirements, final reviews and signatures, final format processes, deposits, binding, etc.

4. INADEQUATE ADVISING

Success in graduate school often depends on a successful mentoring relationship between the faculty advisor and the student. It is important to find out the department faculty's area of expertise before applying to graduate school. Because graduate school is based on the apprenticeship model, the student's area of interest and research is a key factor for an applicant's selection for admission. If the student's area of possible research as indicated on their application is not compatible with any of the department's faculty's area of expertise the student generally will not be admitted. Admittance to a graduate school ideally will mean that there are advisors available in the student's areas of interest.

The general process of selecting an advisor can begin as early as part of the initial admission process or after enrollment, which might be as late as the third year of graduate school. While most students consider the faculty's expertise as the most important criteria for selection, there are other factors to consider. Without much knowledge of the selection process students' expectations of the role of the advisor can be unrealistic. Some students might expect that the role of the academic advisor is to serve in "loco parentis" or "academic parent".

Kerlin (1998) identifies six types of advisors based on their level of involvement and their ability to motivate students. The six types are 1) the uninvolved advisor, 2) the laissez-faire/hands off advisor, 3) the negotiator, 4) the proactive advisor 5) the symbiotic advisory style, and 6) the autocratic advisor. The author suggests that the degree of support, trust and the vulnerability of the student in the advisor/advisee relationship strongly influence the graduate school experience and length of the time to degree. In essence, the students' success in graduate school will largely depend on the relationship he/she builds with his/her advisor and committee members (Azuma, 1999).

In many cases, women and men face the same obstacles in graduate school, but react differently to them. For women, the additional factors that are sometimes (but not always) present include isolation, low self-esteem, harassment and discrimination, unusual time pressures arising from family responsibilities, lack of a support network, and lack of relevant experience. Having an unsupportive advisor can thus become much more of a problem for women than for men (desJardin, 1994).

Students also look to their advisors for career guidance on what to do or pursue after graduating. If a student is not drawn to academia, students need to know what other options are available for them. Students are less likely to dropout if they can find advice specific to their discipline from a trusted advisor (Collins, 2002). Students would benefit from a strategy that would help them know what to expect from an advisor and how to get what is needed.

The academic advisor's time is limited because, after all, he or she is a professor first and is getting paid to teach courses, advise graduate students, supervise graduate research, write books or journal articles, and serve on campus- and university-wide committees. It would be desirable to provide a method of motivating and supporting a graduate student in completing his or her capstone-writing project without much individual advising/coaching from the academic advisor. Having such a strategy would free up the advisor and the student's time to deal specifically with questions that directly related to the advisor's expertise.

5. QUALITY OF LIFE

The quality of life in graduate school is fraught with high levels of competition, uncertainty, stress and sometimes isolation. The decision to leave is not without cost, which can include emotional, financial, professional, and sometimes health costs. In addition, many graduate students have families and outside responsibilities to attend to. The most successful graduate students must learn how to maximize long-term productivity without sacrificing other aspects of their personal life.

Graduate students enter graduate school with different social, socio-economic and academic backgrounds, goals and levels of commitment. They differ by race, gender, class, ethnicity, marital status, parental responsibilities, academic preparation, and prior academic training, experience and achievements. When they enter graduate school they are subjected to a socialization process to acclimate them to the department's culture and identity. It is often intense and influential in that students often have to assess and or replace many of their old values with new ones that more adequately fit the department's model. The level of awareness of the socialization process varies in terms of the student's willingness to assimilate to his or her new environment and ambivalence about the process itself or lack of knowledge about the socialization process. Those who are unwilling to conform eventually leave rather than accept the changes required (Lovitts, 2001; p.41).

A student's quality of life in graduate school is determined by the extent to which the student can integrate his or her academic and social life. Academic integration is influenced by interactions with the department's faculty, fellow students and staff and is the primary purpose of graduate education. These

types of interactions are measured against the student's perception of their intellectual and professional development. Failure to integrate into the academic system will result in early attrition by the student rather voluntary or not (Lovitts, 2001).

When students do not balance either academic or social integration they tend to leave the university. Some may choose to have more fun than complete their coursework and may be asked or encouraged to leave or take a much longer time-to-degree. Lovitts (2001) suggest that students with high levels of social integration should leave early rather than later if their level of financial support is low. Similarly, students with high levels of academic integration might have a longer TTD because of their dissatisfaction with the quality of their work. They tend to pile up a number of incompletes because they are workaholics and are never satisfied with the quality they are able to produce within a given timeframe. The faculty's confidence in the student's ability to complete a dissertation is diminished with this need for perfection and lack of completion. On the other hand those with a balanced view are likely to be "well adjusted and persist" unless some outside factor such as finances, health, or family matter forces them to leave (Lovitts, 2001; p.44).

While writing is the substantial part of completing the thesis or dissertation, students need a product that is structured with the understanding that sometimes it is difficult to get started writing and sometimes writer's block is a reality. The writing instruction should include recommendations on how to get started writing and stay focused, how to keep writing, how to edit and proofread, how to overcome writer's block, practical hints to showing tangible progress and organization, helpful information on incorporating the proposal into the first chapters of the thesis or dissertation, and how to deal with comments from committee members. Instruction about writing may also include instructions about common writing mistakes and how to avoid them.

6. RESEARCH AND WRITING

While dropping out of graduate school is preferably better in the earlier stages, Bowen and Rudenstine (1992) find a disturbing trend in students who never earn their Ph.D. despite having progressed to the ABD phase. The length of time spent in the ABD stage and percentage that never complete their dissertation has increased. They find that the time between the end of the formal coursework and the selection of the dissertation topic has "become an unusually difficult period for graduate students." They suggest that it is not uncommon for students to spend between one and two years searching for a viable topic and writing a dissertation proposal (Bowen & Rudenstine, 1992; p. 254).

As Ronald Azuma (1999) points out, "Excelling in a Ph.D. program requires a different skill set than doing well as an undergraduate. Therefore, students must learn how to do research well and efficiently if they are to complete it in a timely manner."

A Master's thesis is most often an analytical document that provides an answer to a research question chosen by the student. The purpose of writing the document is to help train and refine the student's ability to:

- Think clearly
- Critically analyze
- Conceptualize
- Explain
- Defend
- Debate
- Communicate findings

These skills are being developed and evaluated in both written and oral formats.

Because the style of writing is the same, graduate schools that offer a Ph.D. program often use the Masters' thesis as a practice for the Ph.D. dissertation. Therefore, usually the biggest difference between a Master's thesis and dissertation is the scope of the research. Because many of the processes that are required to write a Master's thesis and dissertation are the same, it is important that the graduate student master these skills, preferably the first time.

Whether writing a Masters' thesis or a Ph.D. dissertation, the document must:

- Follow a particular format
- Conform to a particular style of writing
- Include a requisite number of chapters
- Be original work
- Contribute to the field in which the student now belongs.

Most importantly, a committee of experts in the student's selected field must agree that the paper has met all of the requirements and qualifies to be called a thesis or dissertation. Keep in mind that this is a significant paper: there is more riding on this one analytical document than all of the coursework in the entire graduate school program. Without successfully completing the thesis/dissertation, getting all A's in the coursework means nothing. The student must complete a qualified document and defend it effectively to earn that degree.

In addition to the research project many graduate students will be expected to write technical papers and reports and give presentations at academic conferences. Although these activities might seem superfluous, all are vital activities for students wishing to make professional contacts and find a job after graduation.

Graduate students need to develop skills, actions and tools that will allow them to continually make progress on the goal of obtaining the degree even when everything is not perfect in their universe. In addition graduate students must learn to work around other obligations such as teaching, research obligations, department meetings, professional conferences, and other requirements.

Having a system or tool to help students plan, organize and track research and keep it moving forward will be invaluable to assisting students complete the degree.

It would be helpful to have a product that provides instruction relating to choosing a topic, and which provides questions designed to lead the author through choosing the topic, such as asking whether the topic is interesting to the author, whether it has value to the field of study, etc. Moreover the product should provide instruction to focus the author on the goal of adding to the knowledge that already exists on the topic, as opposed to inadvertently writing about unfeasible topics and getting off-task.

REFERENCES

Azuma, R. T.,(1999). "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." v. 1.05. Retrieved from: <u>http://www.cs.virginia.edu/helpnet/Being_Grad_Stud/grad_school_CS.html</u>

- Bowen, W., Lord, G., and Sosa, J.A. (1991). Measuring time to the doctorate: Reinterpretation of the evidence. Proceedings of the National Academy of Science. USA Vol. 88, pp. 713 717. Retrieved from: http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=50883&action=stream&blobtype=pdf
- Bowen, W.G. and Rudenstine ,N.L., (1992). In Pursuit of the Ph.D. Princeton, NJ: Princeton University Press.

- Collins, A., (2002). Lack of career help may affect attrition, The Chronicle Online: The Independent Daily at Duke University October 11, 2002. . Retrieved from: <u>http://www.chronicle.duke.edu/vnews/display.v/ART/2002/10/11/3da6710aa146e?in_arc hive=1</u>
- Day, J. C., and Newburger, E., (2001). The big payoff: Educational attainment and synthetic estimates of work-life earnings." -- Current Population Reports. July 2002. Special Studies P23-210.
- des Jardins, M., (1994). How to succeed in graduate school: A guide for students and advisors. Part I. ACM Crossroads Student Magazine. Retrieved from: http://info.acm.org/crossroads/xrds1-2/advice1.html
- des Jardin, M., (1994). How to Succeed in Graduate School: A Guide for Students and Advisors. Part II. ACM Crossroads Student Magazine. Retrieved from: http://info.acm.org/crossroads/xrds1-3/advice2.html
- Golde, C.M. & Dore, T.M. (2001). At Cross Purposes: What the experiences of doctoral students reveal about doctoral education (www.phd-survey.org). Philadelphia, PA: A report prepared for The Pew Charitable Trusts.
- Jacobson, J., (2001). Why do so many people leave graduate school without a Ph.D.?, Chronicle of Higher Education, 47,(38).
- Jones, Craig (2002). What if you have a low G.P.A.? CIRES, University of Colorado, Boulder "Graduate Student Retention vs. Attrition, what makes a good fit." Skidmore College Graduate Student Handbook: Graduate Student Advice. Retrieved online from: <u>http://www.skidmore.edu/academics/geo/GradSchool.html</u>
- Kang, M., (2004). Graduate attrition rate still a problem: Despite full funding few Ph.D. candidates complete programs. Columbia Daily Spectator, February 13, 2004. <u>http://www.columbiaspectator.com/vnews/display.v/ART/2004/02/13/402c9e759c9ae?in_archive=1</u>
- Kerlin, B. A., (1998). "Pursuit of the Ph.D.: is it good for your health." Paper presented at the International Multidisciplinary Qualitative Health Research Conference, Vancouver, British Columbia, Canada. Retrieved from: <u>http://kerlins.net/bobbi/myresearch/health.html</u>.
- Kerlin, S. P., (1995). Pursuit of the Ph.D.: "Survival of the fittest, or is it time for a new approach?", Educations Policy Analysis Archives, 3 (16), November 9, 1995. Retrieved from: <u>http://epaa.asu.edu/epaa/v3n16.html</u>
- Lovitts, B. E., and Nelson, C., (2000). The hidden crisis in graduate education: Attrition from Ph.D programs." Academe, 86.(6).
- Lovitts, B. E., (2001). Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study. Rowman and Littlefield Publishers, Inc. New York.
- "Ph.D. Paths at UW –an Update" (2001) Notes on Graduate Education. Te Graduate School-University of Washington No.4 May 2001. Retrieved from: <u>http://www.grad.washington.edu/stats/phd_survey/gradnotes_99_v1.pdf</u>
- Nelson, C. and Lovitts, B.E., (2001). 10 Ways to keep graduate students from quitting. The Chronicle of Higher Education, June 29, 2001.

- Pinson, C. G., (1998). Academic Speed Bumps: Time to Completion of the Dissertation. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University
- Ramos, M. G. (1994). Understanding the ABD (all but dissertation) doctoral candidate: A phenomenological approach. Unpublished doctoral dissertation, University of Kansas.
- Shea, R. H., (2004). Is it right for you? USNews.com. Retrieved from: http://www.usnews.com/usnews/edu/grad/articles/brief/05intro_brief.php

Smallwood, S., (2004). Doctor dropout. The Chronicle of Higher Education, 50 (19).

U.S. Department of Education Office of Education and Improvement NCES 2002-166. (2000) Student Financing of Graduate and First-Professional Education 1999-2000. http://nces.ed.gov/pubs2002/2002166.pdf