

Retention Strategies of a Successful Graduate Program

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Abstract

This case study analyzed a unique doctoral program in education at Dowling College, Long Island, NY that had an 88% graduation rate within seven years that included 60% of students of color in contrast with doctoral graduation rates in the United States that are an average of 38% within seven years with only 24% students of color graduating. This study used a qualitative analysis to learn about their retention. It included documents analyses, pre-survey to alumni, in-depth interviews with thirty-two alumni and three faculty/administrators. Three major themes emerged: a sense of belonging, cooperative learning, faculty-administration support, and students' purpose, and competence. Recommendations to make a graduate program successful are presented.

Introduction

Most of the studies concerning retention and attrition come from undergraduate studies. Tinto's Student Integration Model (1975) and Beans' Student Attrition Model (1985) were the most cited models. Both models are based on undergraduate students, where students' academic and socioeconomic backgrounds are presented as strong variables. However, few studies focus on doctoral programs (Ampaw & Jaeger, 2012).

In 1988, Girves and Wemmerus suggested there is little information on graduate student retention, degree progress, or those motives contributing to some students succeeding in graduate school while others drop out. In 2016, Okahana, Allum, Felder, and Tull presented an extensive study at the Council of Graduate Studies that included 21 universities' doctoral programs. The study showed that the average completion rate for a doctoral program in seven years is 42%, and in 10 years, 50% (Okahana et al., 2016).

This study is focused on a unique case of an Ed.D. doctoral program in the Department of Educational Administration, Leadership and Technology at Dowling College, New York. Within seven years, the doctoral program completion rate was 88% (Manley & Perry, 2014). The doctoral program was serving an average of 135 students per year. This program increased student diversity from 24% in 2008 to 60% in 2016 (Morote, 2016). This study sought to answer the following research question:

1. What themes emerge from crucial insights of alumni and administrators regarding how the doctoral program challenges or influences their retention?

Doctoral program background

As of 2019, the Council of Graduate Studies (GGS) reported that doctoral programs in the USA had 1.8 million students: 59% were women, 24% students of color, and 18% were international students (GSS, 2018; National Center for Education Statistics, 2017). In contrast, Dowling's doctoral program increased the share of students of color from 24% in 2008, 35% in 2011, to 60% in 2016 (Morote, 2016). This is higher than the national diversity average of 24% in 2019.

Dowling College was a non-profit, private higher education institution on Long Island. In 1996 a Doctor of Education (Ed.D.) program was registered in the New York State Office of Higher Education. The initial foundation for the Program was a proposal of "most progressive thinking in the fields of higher education and administration and k-12 leadership" (Smith & Ruhl-Smith, 2000, p.1). At the time of the college closing (in 2016), the doctoral program had three major concentrations: Higher Education, K-12, and Health Care.

The Dowling doctoral program was designed with a cohort model, intensive technological infusion process, a single fee payment plan, a portfolio documentation of successful learning outcomes, and the use of field-relevant topics for student dissertations. Smith and Ruhl-Smith (2000) noted that the doctoral program increased attention to the relationship between technology and leadership (Smith & Ruhl-Smith, 2000).

The most crucial decision of student admission was made in an interview with a group of faculty members. The purpose of the interview was to learn if prospective students had a vision of their future and would be comfortable working in a cooperative learning model with their cohort members. It was essential to know that the student understood the work and effort that the doctoral degree required (R. Manley, personal communication, January 4, 2021).

Faculty were typically seven to nine full-time professors, half of them were retired superintendents who served as mentors for future k-12 leaders. Typically, four were professors with experience in higher education and social agencies. Faculty expertise varied from qualitative researchers, quantitative researchers, and mixed methodologies researchers. The health care students and other students were attracted to the Ed.D. program because of its emphasis on technology applications, leadership, research skills, and encouragement to focus one's coursework research on topics of one's own personal and professional interests. Health-care experts were often invited as guest lecturers.

Students typically collaborated with faculty in writing articles and often, they traveled to present their research at national and international conferences. Ninety percent of the students had the opportunity to present and achieve a peer-reviewed publication or conference paper before graduation. Prestigious conferences, such as the American Educational Research Association (AERA), blind-reviewed doctoral candidates' research and accepted them to present at their annual conference. Dowling College doctoral students were consistently selected by this AERA Conference during these years.

The doctoral program completion rate at five years had an average of 85% and at seven years was 88%. This rate was consistent during its 18 years (Manley & Perry, 2014). This doctoral program produced college presidents, superintendents, principals, professors, hospital directors, and leaders in social agencies (A. Inerra, personal communication, December 12, 2020).

Theoretical framework: Retention in doctoral programs

Tinto (1975) explained that students enter university or college with different intentions, goals, commitments, and expectations. These differences can mainly be traced to students' characteristics (e.g., gender, study skills), prior schooling performance, and family background (e.g., socioeconomic status). Tinto (1975) differentiated between the academic (performance) and social systems (peer relationships) that students are a part of and should be integrated into efforts to prevent attrition. Bean and Metzner (1985) studied attrition on older nontraditional students and found that there were four factors: academic (study habits, course availability), student background (gender, ethnicity, high school performance); environmental (family responsibilities, finances), and psychological (utility, satisfaction, outcome).

In 2012, Ampaw and Jaeger presented a conceptual framework to explain the drop-off rate of doctoral students. They presented three stages of successful persistence-transition, development, and research (Ampaw & Jaeger, 2012, p. 644). Ampaw and Jarger show that although financial aid as a whole is important, the type of financial aid received is even more significant and has differential impacts on doctoral students' retention at

each stage. Doctoral student retention with higher expected earnings motivates doctoral students (Ampaw & Jaeger, 2012).

In 1985, Noel, Levitz, and Saluri explained the importance of college personnel's caring attitude as the most potent retention force on campus. While not the only way to promote a sense of belonging in adult education, group learning (cohorts) has been found to foster it and studies indicate that adult learners benefited greatly from a group learning environment. Drago-Severson et al. (2001), who studied adult learner retention, concluded that participants demonstrate that cohort experiences seem to facilitate academic learning, increased feelings of belonging, broadened perspectives, and, at least by participants' reports, learner persistence. Financial advisement is also crucial. Ehrenberg and Mavros (1995) found that completion rates are sensitive to the types of financial support available to the students.

The most important relationship for a doctoral student is with an advisor, faculty, or chairperson, and this relationship is identified as a critical element for retention (Holley & Caldwell, 2012). However, an advisor, or chairperson who is a good instructor may not be a good mentor (Mullen, 2007; Mullen et al., 1999). Graduate students often worry about the range of permissible dissertation topics (and methods) becoming restricted or where faculty considered suitable for mentorship becomes fewer (Mullen et al., 1999). Minority female mentors, or those practicing alternative forms of research, may experience their mentoring status and efforts diminished during such times by other faculty (Mullen et al., 1999).

Underrepresented students in doctoral programs experienced isolation, marginalization, and less effective interactions with program faculty and tend to drop the program (Ellis, 2005; Jaeger et al., 2009). Developing a collegial relationship with their faculty contributes to success for doctoral students of color (Isik-Ercan, 2012).

This study uses a theoretical framework from Andy Nash and Silja Kallenbach (2009). Nash and Kallenbach analyzed 18 adult programs in New England, USA, and identified the persistence strategies that derived their power from the fact that they met six affective needs of adults (Nash & Kallenbach, 2009). The six affective needs are described as: *Sense of belonging & community of learners*: This is referred to how students experience the sense of belonging to a community at the program or class. *Clarity of purpose*: This is referred to as that learner should have concrete and measurable goals. *Agency*: Learners feel capable of initiating actions to benefit themselves. Human agency is the capacity for human beings to make things happen through their actions. *Competence*: Learners want to build competence in areas that more schooling can address. Learners believe their efforts will lead to success. *Relevance*: The instructional program is meaningful to the learners' needs and interests; and *Stability*: The program offers

the structure, predictability, and sense of safety that learners need to feel confident about their progress.

In 2015, Bolla, Agasistc, and Johnes did a quantitative study analyzing several independent variables correlated with the doctoral graduation rate. The following variables were evaluated - entrance tests such as GRE, assistantships, grants for students, student support activities such as writing support, statistics support, annual review, workspace, on-campus research conferences, and travel support. Also considered were program-based statistics on the share of female faculty, female students, international students, faculty research, faculty tenure. Of all the variables mentioned, they found to be relevant the following variables for doctoral programs: small universities tend to have a higher graduation doctoral rate, an international student body, presence of female students, students focused (full-time) on their research interests (and the presence of financial support), high-quality (and recently trained) academic staff in addition to an on-campus conference at which students could present their work appeared to be related significantly to completion rates.

Methodology

A short survey was posted to an alumni social media group. Thirty-two people answered that survey. Alumni were asked if they were willing to be interviewed. Of those willing, the researchers divided participants among race, ethnicity, gender, place of work (k-12 or higher education or social agency) and then randomly sampled the respondents according to the group to which they were assigned. Three researchers created an interview guide after the pre-survey, making minor changes to the open-ended questions. Researchers conducted semi-structured interviews of twelve individuals: nine alumni and three professors/administrators.

All data was stored in a password-protected Dropbox cloud (dropbox.com). The researchers maintained a comprehensive case-study database in Microsoft Word to include interview schedules and interviewees' demographics (Yin, 2018). Multiple methods to collect data facilitated its triangulation during the analysis phase and contributed to the credibility, dependability, and quality of the collected data (Billups, 2014; Creswell, 2017; Tracy, 2010; Yin, 2018). A two-step process (Mayring, 2008) was applied to analyze the data. The first step was to analyze the single cases using thematic analysis. The researchers engaged in a cross-case analysis (Cruzes et al., 2015). The first step in analyzing the recorded data consisted of a complete transcription of the recordings. The zoom transcripts were immediately subjected to find critical themes of the interview. A cross-sectional analysis was performed by the three researchers who sequenced and coded the data independently. The researchers then triangulated the data, sharing the coding they had done independently, one interview after another. In addition, the researchers shared with the interviewees thematic findings to get feedback on whether the results represent their lived experiences. Their comments were used to refine the findings.

Description of the participants

Thirty-two alumni spanning over two decades of the program responded to the pre-test. Seventy-eight percent were female and 21% male. Fifty percent were Caucasian, and fifty percent were from underrepresented groups. Fifty percent are currently working in K-12, 25% in higher education, and 25% in social agencies. Sixty-two percent were over 50-year-old, and 38% were between 30-49 years old. From these participants, nine alumni volunteers were invited to in-depth interviews. Alumni were coded (K= working in k-12 environment, S = working in social agency or higher education institution, C = Caucasian, M = Minority, F = Female), and three faculty/administrators were coded as A1, A2, and A3. The following three themes emerged:

Theme 1. Sense of belonging & cooperative learning

This theme reflects that doctoral students need to feel part of a group and desire connections with their peers, professors, and administrators. This was reinforced by the comments of respondents that the program was organized in cohorts between 9-15 students creating a doctoral family. In addition, students felt comfortable seeing the diverse faculty. The following comments support this: KC2: "...that sense of community has never really gone away"; SMF1: "I appreciated the environment, after a while, I think they created a good learning environment"; SMF2: "There was a sense of belonging as we had the largest group of our cohort...we ended up writing a book together." Students of color mentioned that having professors of color was essential for them.

Three categories were highlighted on this theme: people create sense of belonging, cooperative learning through cohorts, and diversity.

- *Students, faculty, and administration* create sense of belonging: KC2: "100%, I would say that you felt like part of a family, I think the support you know within the cohort and also from the faculty was tremendous"

- *Cooperative learning through cohorts*. The doctoral program created a community of learners. The comments were very positive towards cohorts: KSCF: "You know, with the cohort model we felt that we belong to each other."; A3: "At the open house we say, you are going to join a diverse community of scholars; you are going to join a community of professional leaders."

- *Diversity*. Most of the students celebrated being in a diverse group and the faculty diversity. Some students pointed out some differences between faculty diversity and cohort diversity. Diversity was understood differently from the interviewee's background. Comments such as: KCF1: "The diversity amongst the staff ... had such different views, allow us as students to go in with eyes wide open and if you were the sponge that wanted to soak it in, they let you."

Theme 2. Faculty-administration support

Students explained that they felt faculty support and mentorship during the process and after the process. They developed close ties with their professors specially with their methodologist and chair of the dissertation. Administrators often played the role of counselor and supported the students with a personal interest in their well-being. Professors often ended up co-authoring articles and travelling to conferences with students. The following comments support this theme: KCF1: "I was drawn to the professors, which was a blend of those who were current practitioners and those who were full time professors. I did not want a program that was 100% theory or 100% practical. I wanted the combination". SMF1: "...the biggest factor was my referral (to the doctoral program) from my mentor"

Theme 3. Clear purpose & competence

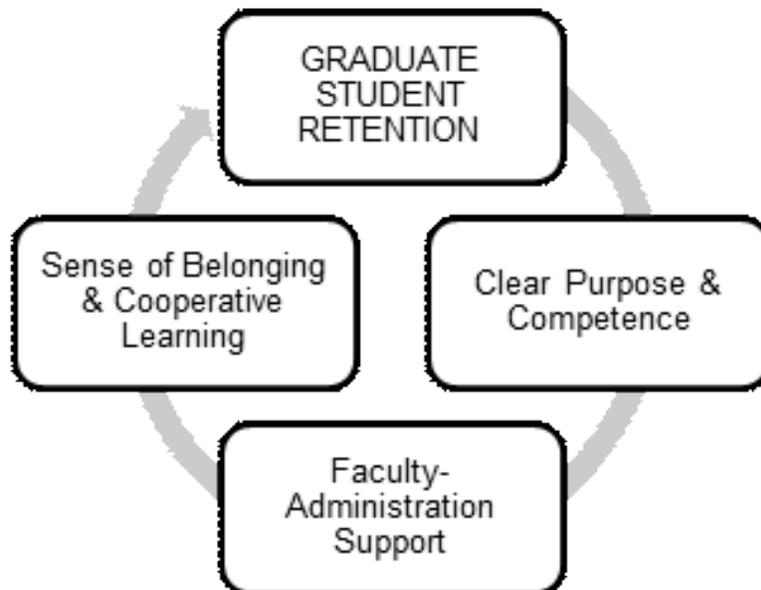
Students, faculty, and administration had one purpose- Student graduation and success. This purpose comes from the administration's desire to see the students succeed. Students reported that the faculty created a culture of success. The students also felt the information provided in the doctoral programs was relevant and increased their competence level, assuring themselves that they were employable after graduation. A2 commented: "one of the things we had decided early on is if

we accepted someone into the program they were going to be successful, and we were going to make that happen" and the same for students as commented by KCF1: "...what Dowling offered in their program matched up to what my personal and professional goals were" and SMF3: "Education was always the priority in my family". Comments that show confidence in their competence were KCF1: "You know I think it helped me grow personally and professionally. I don't think that I would have been here as easily as a superintendent of a medium-sized school district or a female who had never been in the K 12 classroom, the doctorate helped me." Quotes that show confidence and competence were: KC2: "...I was fortunate enough to have an opportunity to apply for Superintendent. I entered the Superintendent's role probably somewhat ahead of the curve at the time"; SMF3: "I'm a Vice President of a hospital!"

In sum, retention is supported by three major themes: sense of belonging and cooperative learning, faculty-administration support, and clear purpose & competence (**Figure 1**).

These themes are consistent with the literature (**Table 1**). However, variables such as background (race, previous academic performance) mentioned by Tinto (1975) and Bean and Metzner (1985) were not retention factors in this case study. *The sense of belonging & cooperative learning* was discussed by Nash and Kallenbach (2009) when they analyzed the retention of adult students.

Figure 1. Graduate student retention's themes



This sense of belonging was also promoted for the cohort model that Dowling doctoral program followed. This is consistent with several studies such as Drago-Severson (2016); social systems (Tinto, 1975), and Mullen et al. (1999), who found that cohort models supported a sense of belonging and included peer support. Bollia, Agasistc, and Johnes (2015) mentioned the role of international students in retention. However, few studies mentioned student and faculty diversity as part of creating a sense of belonging, as was found in this case study.

Faculty-administration support was a key theme that supported retention. Several studies support this, such as (Nash & Kallenbach, 2009; Girves & Wemmerus, 1988; and Bollia et al., 2015). These studies discuss faculty training, faculty mentorship, and caring administration (Nash & Kallenbach, 2009; Girves & Wemmerus, 1988; Bollia et al., 2015).

The last theme was *clear purpose & competence*. This theme is aligned with Nash and Kallenbach (2009) when they pointed out "purpose" as one of their six components of adult retention and goals (Bean and Metzner,

1985). At the same time, Nash and Kallenbach (2009) highlighted the importance of students feeling their learning is relevant and leads to competence. Competence is related with the goal of getting higher earnings as Ampaw and Jaeger (2012) indicated.

Recommendations

In summary, the purpose of the doctoral program for some is their personal growth, personally and professionally, and for others it is to expand their confidence level and the skills and aptitude that will help them in opening doors to career advancement.

The following recommendations summarize the aspects of doctoral programs that increase graduate student retention and graduation rates.

Sense of belonging & cooperative learning: create cohorts as they have been proven to increase retention; create peer mentorship activities and support social networking activities.

Themes	Topic / Literature aligned
<i>Sense of Belonging & Cooperative Learning</i>	<ul style="list-style-type: none"> • Group learning (Noel, Levitz & Saluri, 1985); cohorts (Drago-Severson et al., 2001). • Sense of belonging & community of learners (Nash & Kallenbach, 2009) • International students (Bollia, Agasistc & Johnes, 2015) • Research conference on campus (Bollia, Agasistc & Johnes, 2015) • Social systems (Tinto, 1975)
<i>Faculty-Administration Support</i>	<ul style="list-style-type: none"> • Financial advisement (Ampaw & Jaeger, 2012) • College caring attitude (Noel, Levitz and Saluri, 1985) • Advisor (mentor) key element of retention (Holley & Caldwell, 2012; Mullen, 2007; Mullen et al., 1999). • Collegial relationship with faculty (Zeynep Isik-Ercan, 2012). • Stability (Nash & Kallenbach, 2009)
<i>Clear Purpose & Competence</i>	<ul style="list-style-type: none"> • Expected earnings (Ampaw & Jaeger, 2012, p. 644). • Clarity of purpose (Nash & Kallenbach, 2009) • Competence (Nash & Kallenbach, 2009) • Relevance (Nash & Kallenbach, 2009) • Psychological – outcomes, goals (Bean and Metzner, 1985).

Faculty and administration support: increase diversity in the student body and faculty body; have an administrator or counselor on-site that provides individualized counseling and follow-up with students, and create on-site research activities such as symposiums or conferences

Clear purpose & competence: provide engagement activities to support student perseverance and review curricula to align with current market needs.

Adult learners require a clear purpose, a caring faculty and administration, relevance and participation in the learning process, a sense of belonging and collegiality in their studies and research efforts. Small group seminars at the stage of writing a dissertation can expand peer and faculty support as well as task commitments of students.

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