PROMISING PRACTICE

The 50% Tipping Point: Addressing Doctoral Student Attrition Through Institutional Innovation

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ABOUT THE AUTHORS

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Doctoral attrition is a well-known issue, and stakeholders constantly seek solutions to minimize its occurrence. Reported statistics on doctoral attrition over the past decade have consistently remained at 50% (Artiles & Matusovich, 2020; Jaksztat et al., 2021; Moran, 2017; Van Rooij et al., 2021; Young et al., 2019). Most of these reports suggest that social isolation during the dissertation phase is a primary contributor to attrition rates in doctoral programs. Historically, Golde (2005) perceived doctoral attrition as a paradox because doctoral students, who are academically revered, are consistently failing to complete their graduate education. Several factors contribute to doctoral attrition, including a student's lack of perseverance, an inability to balance work and academic responsibilities, a lack of interest in pursuing academia as a profession, poor research skills, losing faith in their ability to succeed, and wallowing in self-pity (Council of Graduate Schools [CGS], 2023; Maher et al., 2020;

Motseke, 2016; Van Rooij et al., 2021; Young et al., 2019). Although different interventions have been used to create supportive structures, the problem remains persistent.

The impact of higher education institutions (HEIs) cannot be underestimated in addressing this problem due to their critical role in contributing to students' persistence and success (Artiles & Matusovich, 2020; Patterson, 2016; Spaulding & Rockinson-Szapkiw, 2012). Most importantly, according to Pifer and Baker (2016), admitting a student into a doctoral program establishes a partnership between the institution and the student, necessitating comprehensive support interventions to facilitate timely degree completion. Therefore, the focus here is more on what HEIs can do to enhance the experience of doctoral students and increase their success rates. Against this backdrop, this paper reviews three unique strategies that institutions of higher learning can adopt to better support their doctoral students, reduce the high attrition rate, and, eventually, increase their degree completion. The central question explored in this paper is, "What proactive strategies can HEIs employ to improve doctoral student retention and completion?"

The Paradox of Doctoral Attrition: The 50% Tipping Point

Attrition among doctoral students is a global and recurrent problem in higher education (Artiles & Matusovich, 2020; Jaksztat et al., 2021; Van Rooij et al., 2021; Young et al., 2019). A recent report from Norway, for instance, revealed that based on the 2016–2021 cohort assessment, about 48% of the students dropped out of their doctoral programs (Statistics Norway, 2022). Jaksztat et al. (2021) confirmed that women are more likely to drop out of specific fields of study, highlighting a concerning gender disparity in academic persistence. Assessing the situation in the United States, Young et al. (2019) reported a 36–51% range as the attrition rate for doctoral students. Although these rates have been relatively stable over time, the issue is of growing concern given the recent decrease in doctoral degree conferment. According to the Survey of Earned Doctorates (SED), in 2020, the number of research doctorate degrees conferred by U.S. institutions in 2021 reduced from 55,224 to 52,250 (National Science Foundation [NSF], 2022). This reduction, which represents –5.4% in 2021, is the second annual decline in consecutive years and the highest in the SED's history since the survey's beginning in 1957 (NSF, 2022). Similarly,

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Cosgrove (2022) affirmed that doctoral education has struggled with a persistent 50% attrition rate for nearly four decades. Cosgrove added that this chronic issue has far-reaching consequences, affecting students, institutions, and society.

Doctoral attrition remains a significant issue in higher education, with factors such as lack of interest in academia, lack of institutional support during stressful times, and inability to balance work and academic responsibilities being key factors (Cassuto, 2013; Dunn, 2014; Motseke, 2016; Van Rooij et al., 2021). Existing research shows that doctoral students drop out due to various obstacles, including financial constraints, poor advisor fit, social exclusion, and insufficient social support (Ali & Kohun, 2006; Golde, 2005; Jairam & Kahl, 2012; Lovitts, 2001; Maddox, 2017; Rigler et al., 2017; Strayhorn, 2010). The dissertation writing phase is often the most challenging, as it disconnects students from their academic community and limits their ability to manage mental fatigue and social isolation (Martinez et al., 2013; Van Wingerden, 2024). The CGS (2010, 2023) remains a leading authority on doctoral attrition, with its PhD Completion Project providing comprehensive information on the process. The CGS (2023) identified six variables that affect a student's ability to finish their doctoral degree: selection, mentoring, financial support, program environment, field research mode, processes, and procedures. Despite high and promising conditions, about half of the students enrolled in doctorate programs in the United States complete their degrees.

Doctorate completion rates vary significantly by ethnicity, with White students accounting for 63.36% of degrees awarded. A report by the NSF (2022) also supported the 9–10-year time to degree (from entry to graduate school till degree conferment). However, the overall graduation rate for doctoral students remains alarmingly low, hovering around 50% even after 10 years (Irwin et al., 2024; Lively, 2022; Statista, 2022). A critical and logical question with this alarming 50% attrition rate is what should be done to improve the completion rate of the remaining 50%. To address this issue, Lovitts (2001) suggested that the institution should bear the brunt of responsibility for turnover among doctoral students. Lovitts asserted that students' desire to persevere is a result of their ability to engage with teachers, administrators, and peers within their departments or programs of study. Wiedman et al. (2001)

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strengthened Lovitt's argument with their concept of socialization within graduate programs. They stressed that graduate education is a complicated interplay between the students and the groups they find themselves in, and the efficacy of this socialization paradigm is driven by the student's character and prior events. Based on his findings, Cassuto (2013) also suggested that a graduate program's atmosphere and actual setting are essential factors in retaining its students but questions what would be an acceptable rate of attrition.

Building on the Interventions to Innovate Institutional Support

In the following section, this article will review three of these already-in-use intervention models developed to increase retention among doctoral students. The models chosen were the stage-based challenges and support techniques in doctoral education (Pifer & Baker, 2016), the dissertation house model (Carter-Veale et al., 2016), and the doctoral support center (West et al., 2011). These three programs were chosen because they each present a distinctive strategy for aiding students in pursuing doctoral education. By shedding light on these unique strategies, institutions of higher learning can diversify their approach to supporting their doctoral candidates, reduce attrition, and, eventually, increase degree completion.

Stage-Based Models

Pifer and Baker's (2016) investigative study contributed significantly to understanding doctoral education in the United States. Through a systematic review of empirical research conducted between 2000 and 2015, the authors identified critical characteristics of doctoral education, including distinct transitional stages and the involvement of three primary stakeholders: doctoral students, academic staff, and higher education administrators. Their analysis led to the advocacy of the stage-based challenges and support techniques in doctoral education stage-based models (SBM), a three-stage model comprising knowledge consumption, knowledge creation, and knowledge enactment. This conceptual framework aligns with the inherent progression of doctoral education, wherein students transition from assimilating existing knowledge to generating original research and ultimately applying it. The SBM provides a nuanced understanding of the challenges encountered by doctoral students at each juncture. By acknowledging these

stage-specific obstacles, stakeholders can develop targeted interventions to facilitate student success. Pifer and Baker offered actionable recommendations for navigating these challenges, rendering SBM an essential tool for enhancing doctoral education.

Dissertation House Model

Another model is the dissertation house model (DHM), which was established in 2006 by the University of Maryland (Tull et al., 2012) to assist doctoral students in STEM transition from candidacy to completion. The DHM, introduced by Carter-Veale et al. (2016), is a multidisciplinary approach that involves multiple mentors across several disciplines, providing support through interdisciplinary collaborative cohorts. The program was initially designed to increase social support for African American and Hispanic postgraduate students working on their master's theses, doctoral proposals, or dissertations. For the pilot study, the DHM had an underrepresented faculty member as the "dissertation coach" who served as a facilitator, coordinator, and mentor to the students (Carter-Veale et al., 2016, p. 3). The DHM has evolved slightly since its initial organization, with the first program being open to all graduate students at an advanced stage of their doctoral program at no cost.

Participants must be full-time or part-time students of the institution hosting the DHM, and interested students must be at the dissertation stage of their doctoral program and show proof of planning to complete the degree within 6 months. The DHM sessions were held on campus for four consecutive days, including goal setting, coaching sessions, mini-lectures, and uninterrupted writing. The program was scheduled for winter and summer breaks, with meals provided for breakfast, lunch, and snacks. The program organizers and the dissertation coach offered continuous support through the DHM website. The dissertation coach plays a unique role in this model, acting as both a master planner and an external mentor for students. The program is organized outside the academic departments and allows students to have open discussions with the coach, particularly regarding dissertation struggles. Participating students experienced increased value from the dissertation coaching program. According to Carter-Veale et al. (2016), the propensity score analysis used to evaluate this program revealed that students who participated in the DHM had a higher propensity to complete their doctorates.

Doctoral Support Center

The doctoral support center (DSC) is the final model. The DSC was established in 2004 to provide services during the program's coursework, proposal, and dissertation writing phases. The DSC involved a director and three writing advisors supporting approximately 130 students annually, conducting an average of 235 monthly appointments. The DSC provided one-on-one writing consultations, structured group meetings, and workshops to support students in their doctoral journey. Support for the DSC model comes from West et al. (2011), who conducted a study on the impact of social isolation on doctoral students, focusing on the role of institutions in addressing this issue. The authors found that the DSC was helpful due to the progress made after participating in a four-day off-campus retreat called "Operation Dissertation Acceleration" to determine that the DSC is an effective intervention to support students in completing their doctorate degrees (West et al., 2011, p. 10).

Recommendations for Future Consideration

Even though all models underscore a shared commitment to supporting the success and development of doctoral students, each has its strengths, key differences, and considerations that must be weighed. Institutions must prioritize understanding the diverse needs of their students, recognizing that some thrive in structured environments while others require immersive experiences. The stage-based model differs significantly in structure and focus from the dissertation house and the doctoral support center models. The stage-based model provides a structured approach, dividing the doctoral journey into stages with milestone-based progress and regular check-ins. In contrast, the dissertation house and doctoral support center models offer more intensive interventions. The dissertation house model provides an immersive experience, focusing on writing productivity through intensive writing retreats. The doctoral support center model takes a more comprehensive approach, prioritizing community building and holistic support by providing centralized resources, individualized coaching, and workshops.

To make an informed decision, institutions should conduct thorough needs assessments to grasp student requirements and program objectives. Evaluating resource availability and potential scalability ensures the model's long-term viability. Considering multiple models or a hybrid approach can provide flexibility. Ultimately, selecting the suitable doctoral support model requires careful deliberation on these factors to foster student success and program excellence. Doctoral support interventions are crucial in managing attrition, but efforts continue to fall short of significantly improving retention rates. Rather than student capabilities, systematic gaps hinder completion (CGS, 2023; Dunn, 2014; Rigler et al., 2017). To mitigate this situation, institutions should consider establishing a centralized doctoral support office that offers comprehensive resources, including writing centers staffed by full-time experts.

Key recommendations include mandatory check-ins for all-but-dissertation (ABD) students, adopting the dissertation house model's all-inclusive approach, organizing writing retreats and professional development programs, and providing mental health resources. Introducing semi-structured protocols, such as alternative graduation pathways, can also encourage completion. Furthermore, exploring faculty perspectives on best practices can provide valuable insights into boosting doctoral student completion rates.

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Congratulations to *J-CASP* Associate Editor Jonathan Vontsteen honored with the Susan E. Hashway Outstanding Dissertation Award

Jonathan Vontsteen, PhD, a May 2024 graduate of the doctoral program in developmental education at Texas State University and Associate Editor of *J-CASP*, has been honored with the Susan E. Hashway Outstanding Dissertation Award. The accolade, presented annually by the National Organization for Student Success, recognizes exceptional research contributions in developmental education and student support.

The award commemorates Susan E. Hashway, a pioneer in the field who taught in Grambling State University's graduate program for developmental education. The award underscores the importance of advancing scholarship and practice in developmental education, a mission Vontsteen has embraced wholeheartedly.