Supporting the Social Integration of Online Doctoral Students through Peer Mentoring

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Abstract

The problem of online doctoral student attrition has led institutions to explore solutions to support student completion. According to Tinto's model of institutional departure, learners' social and academic integration must be addressed to increase retention. At online institutions, learners' social integration can be challenging because of fewer personal interactions. Learning centers are in a unique position to create online peer mentoring programs to foster learners' social integration by offering opportunities to build community through social media and virtual events. In this article, the authors provide an overview of how such a program has been developed, implemented, and assessed.

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Completing a doctoral degree can positively impact an individual's career and income (Brill et al., 2014), as those with a doctoral degree have low unemployment rates and high weekly median incomes (Bureau of Labor Statistics, 2019). Although a doctoral degree is a positive investment that comes with many benefits, attrition rates within these programs are high and can negatively impact individuals and institutions. Students who leave before completion are affected by an accumulation of student debt, while institutions may be negatively impacted as attrition rates are often tied to accountability (Eaton, 2011). Given the potential adverse effects of attrition, institutions must develop plans to address this issue. Viewing the challenges of online doctoral students, such as feelings of isolation (McCracken, 2004), through the lens of Tinto's (1975) model of institutional departure provided us insights into how to support learners' social integration through the development of an online doctoral peer mentor program.

The Doctoral Student Experience

Completing a doctoral degree is not an easy task, as it comes with many academic, personal, and financial challenges along the way. Riger et al. (2017) noted that traditional face-to-face doctoral programs face attrition rates up to 50%, while online doctoral programs report attrition rates up to 5% higher (Shaw et al., 2016).

Not only must doctoral students develop knowledge and skills to become experts in their field of study, but they must also develop their own research identity (Lamar & Helm, 2017) and adapt to the norms and expectations of their field (Foot et al., 2014). However, many students may not be prepared to handle aspects of a doctoral program (Hunter & Devine, 2016), which can lead to high levels of anxiety (Coffman et al., 2016) and emotional exhaustion (Hunter & Devine, 2016) that may lead to dissatisfaction and withdrawal (Pyhalto et al., 2012).

Although doctoral students face many challenges, researchers have identified factors that can contribute to success and persistence. Researchers have found positive relationships with supervisors (Gube et al., 2017), high self-efficacy (Litalien & Guay, 2015), reflective coping practices (Schacham & Od-Cohen, 2009), self-motivation (Stubb et al., 2012), and positive writing strategies (Castelló et al., 2009) can all positively influence student success and retention. Doctoral students also benefit when they feel they belong in their program and have opportunities to connect with peers (Gray et al., 2015). These factors highlight that, to be successful, doctoral students need to believe they can complete their program, have sufficient skills and strategies, and have social support.

The Challenge of Online Doctoral Student Retention

In addition to the experiences discussed above, online doctoral students often face further challenges that can impact their experience and success. For example, students new to the online learning environment may face challenges adjusting to the different educational setting, including technical difficulties (Harrell, 2008), which may prohibit them from socially interacting at a level that creates a sense of community. Many universities provide support for online students when it comes to technology by offering dedicated technical support and resources. However, more is needed beyond technical support for students to feel comfortable and acclimated; students need information about university resources, effective academic skills, and proper NetEtiquette (Harrell, 2008). These topics could be covered within a well-designed orientation program to help students begin their programs strongly, but online learners face a larger ongoing problem that can lead to withdrawal – isolation (McCracken, 2004). Those feelings of isolation may not be addressed within the standard structure of an online program.

Online programs are often structured to allow for increased flexibility rather than ample opportunities for connection and collaboration. This flexible model means that online doctoral students may not have the opportunity to collaborate with faculty members on research, participate in lab meetings, or attend

conferences with peers in their program (Denman et al., 2018), which can lead to feelings of isolation (Ames et al., 2018). In general, students in online programs do not have the opportunity to have "informal interactions occurring naturally in face-to-face environments" across campus, limiting their ability to build relationships (Koole & Stack, 2016, p. 44). This lack of connection with peers is problematic, as researchers have identified social integration and belongingness as critical factors in student retention and persistence (Rovai, 2003). Because of the natural isolation of online learning, institutions must be proactive and intentional in supporting online learners to become socially connected to peers.

Tinto's Model of Institutional Departure

After reviewing the challenges of online doctoral student retention, it is important to consider a student retention model that can help learning center administrators best support online doctoral students academically and socially. Tinto's (1975) model of institutional departure considers an individual's family background, personal experiences, and pre-university education as the beginning attributes in a student's decision to retain or drop out. Nicoletti (2019) described this combination as "baggage" that has a relevant impact on both (a) the motivations that push individuals to join an institution of higher education to get a degree and (b) the delineation and strengthening of the student's expectations and convictions regarding the completion of the course (p. 57).

Additionally, Tinto considers academic factors, such as academic performance and intellectual development, and social factors, such as peer and faculty interactions, that will impact the student's decision to continue or depart from a program (Nicoletti, 2019).

In the context of supporting social integration, if administrators can better understand how the "baggage" that Nicoletti (2019, p. 57) described impacts students, they can do their best to create programs that support students socially as they start an online course or program. As Nicolleti (2019) shared, the more a student is integrated into both academic and social spheres, the greater their commitment to the institution and the greater their commitment to the goal of persistence and completion of the course. To best support students, it is vital for administrators to understand doctoral students enter their programs with a variety of background experiences, motivations, ranges of academic and social situations, and capacities for teaching, research, and scholarly productivity, which result in varying developmental progression rates (Ward & Gardner, 2008). Learning centers must be aware of the differences and similarities of the student population they are supporting to create impactful programming to address learners' academic and social integration.

Once the student population is understood, administrators can build a program to purposefully create an environment for social integration that encourages online learners to connect, understand

the resources available to them, learn their new roles as scholar-practitioners, and capitalize on their purpose for being in their selected academic program. In online programs, creating a sense of belonging with a structured environment to make connections is critical; as Tinto (2017) stated, "…students have to become engaged and come to see themselves as a member of the community of other students, academics, professional staff who value their membership…" (p. 3). Developing a program that allows for meaningful engagement, a sincere connection between peers, and opportunities to build on skills for academic success brings value to the student experience and can support their success and persistence.

Applications of Tinto's Model to Peer Mentoring Programs in the Online Setting

Tinto's model highlights the importance of both academic and social integration. Institutions can support academic integration through a well-designed curriculum and other scholarly opportunities, but as Thomas et al. (2014) noted, online learners' social integration is often overlooked. However, learning centers are in a unique position to address the gap of social integration at online institutions by creating peer mentoring programs. Traditional programs have found that peer mentoring programs can increase mentored students' sense of connectedness and integration (Yomtov et al., 2017), buffer the transition into the university (Clark

et al., 2013), and help to support retention (Collings et al., 2014). Given the positive outcomes of peer mentoring programs, the Academic Skills Center at Walden University developed a peer mentor program to support new online doctoral learners.

Structure of an Online Doctoral Peer Mentor Program

Peer mentors can take on different roles at universities, with some providing tutoring support or working in an advising role. In alignment with other programs designed to help students adapt to a new level of education (see Clark et al., 2013), our peer mentors do support the academic integration of learners by sharing information about university programs and services to support success. However, the Doctoral Peer Mentor Program at Walden University leans heavily on Tinto's model to also emphasize the social integration of new online doctoral learners. The peer mentors within our program focus on helping mentees make social connections, adapt to their new identities as scholar-practitioners, and build academic and noncognitive skills necessary for success. Building social connections is a key focus within our mission statement and program offerings. In our program, mentors provide advice and support to mentees using their own experiences and relevant resources from across the university, moving beyond peer mentoring roles that may focus solely on learners' academic development.

It is the peer mentors and staff leadership who drive the program initiatives. The following sections will provide more details about the Academic Skills Center, program leaders and peer mentors, and student demographic information for those who have connected with the mentor team. This additional information may be helpful to others interested in replicating a similar program.

Academic Skills Center

The Doctoral Peer Mentor Program is part of the Academic Skills Center at Walden University, an online university offering undergraduate and graduate degrees, certificates, and lifelong learning opportunities across a variety of fields and programs. In addition to the Doctoral Peer Mentor Program, the center offers individual and group tutoring support in multiple areas, including statistics and math, and offers interactive modules and resources on a variety of skills, such as time management, stress management, and reading strategies. All programs in the center are designed to align with the vision of empowering students to build confidence and self-efficacy in skills essential to their success at Walden University and beyond.

Staff Leadership

The Doctoral Peer Mentor Program's leadership team consists of the Academic Skills Center director, associate director of mentoring and tutoring, and the program coordinator. The center's director escalates initiatives and budget requests to university leadership,

while the associate director and program coordinator work closely on short- and long-term program goals, program plans, hiring, and ongoing development. The associate director acts as an ambassador of the program, communicating with key stakeholders within the university on issues that impact the program's success, including advising, enrollment, and faculty. The coordinator works closely with the peer mentor team to organize and manage the mentee cohorts within a Blackboard classroom, to support and oversee the mentor's communications with students, to collect monthly program data, and to organize all synchronous and asynchronous activities offered by the mentor team. It takes staff leadership at every level to ensure that mentors are offering the best social support available in providing new doctoral students a positive experience as they are starting their programs.

Doctoral Peer Mentors

Doctoral peer mentors at Walden University serve as graduate assistants within the Academic Skills Center. All peer mentors are successful doctoral students who have completed at least one year of their program and have attended a required academic residency, a face-to-face learning experience designed to supplement online coursework and allow students opportunities to connect with faculty, staff, and peers. They also have previous mentoring, coaching, or teaching experience. We intentionally hire doctoral peer mentors who represent the variety of colleges within the

university, including The Richard Riley College of Education and Leadership, College of Health Sciences, College of Management and Technology, College of Nursing, and College of Social and Behavioral Sciences. Based on program feedback, mentees prefer to connect with a peer mentor enrolled in the same program. The program coordinator manually matches mentors and mentees, first trying to match them based on academic program. When this is not possible, perhaps due to mentor bandwidth, the coordinator matches mentees with a peer mentor in the same college. When there are multiple peer mentors from the same program or college, mentees from those program areas are randomly assigned to those mentors, with a focus on balancing the cohort numbers. Currently, there are no other set criteria used to identify and match mentors and mentees. However, if a student reaches out to request a specific mentor, we can typically accommodate those requests.

As of January 2021, we have 13 mentors representing 11 different doctoral degree programs across all five colleges at Walden. Beyond the degree programs our mentors represent, they all have different professional experiences that add value to our program and their interactions with students. Some of the mentor professions include social work, business, higher education, epidemiology, nursing, psychology, teaching, clinical research, and counseling. The peer mentor staff represents the diverse ethnicity of Walden's student body (see Walden, 2020), which resonates well with all new

incoming doctoral students. New students can relate to their mentors in one way or another based on shared academic program, professional experiences, or ethnic background. Doctoral peer mentor positions are posted on Walden's external job board online, and we do accept referrals from faculty; however, the position is so popular there is typically an abundance of qualified applicants for the positions. The doctoral peer mentor positions require 40 hours of work per month, for an average of 10 hours per week. The position offers plenty of flexibility so mentors can support new students around their own schedules and academic work. Once hired, mentors complete FERPA training and a doctoral peer mentor self-paced training module covering position expectations and best practices, attend virtual meetings with the program coordinator, and complete a peer mentor training checklist. The training checklist is designed to help new peer mentors become more familiar with university-wide resources and services, read research on peer mentoring, and set-up and use tools necessary for their role, including their email and the appointment system. Beyond the initial training, best practice documents are shared with the mentors and revisited regularly during monthly team meetings. Monthly team meetings allow the team to connect, share ideas, ask questions, and encourage one another as they support their peers. A thorough training program and consistent team check-ins have created a solid foundation for maintaining a diverse and well-

balanced team of mentors who have the capacity to support a cohort of approximately 75 new mentees from Walden's student body each term start.

Mentees

The mentees who participate in the Doctoral Peer Mentor Program are newly enrolled doctoral students at Walden University. Before each term start, new doctoral students can request a doctoral peer mentor by completing an online request form. Like the peer mentors, mentees in the program represent a wide variety of colleges at Walden, as illustrated in Table 1. Of program mentees, 75% are female, and 23% are male, consistent with the larger student population (Walden University, 2020). More details regarding the ethnicity of program mentees are provided in Table 2. This data demonstrates the great diversity of students peer mentors connect with and build a relationship with during the beginning stages of the students' doctoral program.

Table 1.

College Representation in Mentoring Program

College Name	Student Representation
College of Social and Behavioral Sciences	50%
College of Education and Leadership	18%
College of Health Sciences	16%
College of Nursing	9%
College of Management and Technology	7%

Table 2.

Ethnicity of Students in the Doctoral Peer Mentor Program

Ethnicity	Student Representation
Black or African American	51%
White	30%
Unknown	8%
Hispanic or Latino	7%
Asian	2%
Two or more races	1%

Mentors and mentees connect in various ways beginning no earlier than one week before the start of classes. Mentors reach out via email to introduce themselves and begin sharing information with mentees. Throughout the term, mentors send out weekly emails with tips and resources on a variety of topics, from adjusting to doctoral life, handling procrastination, overcoming the imposter phenomenon, and communicating with faculty, to name a few. Sending out motivational and informational emails has been shown to positively impact online learners' retention (Huett et al., 2008).

Although researchers have found a positive impact of motivational and informational emails, there are no known studies related to the impact of such emails on online learners' social integration. Given our specific mission to support social integration and the importance of such integration, as Tinto (1975) highlighted, we expanded the program to include additional opportunities for mentees to create social connections and community.

Fostering Social Integration of Online Doctoral Students

Mentees within the Doctoral Peer Mentor Program have many opportunities to connect with their assigned mentor and other mentors and mentees in the program. For example, the program includes individual synchronous appointments, live webinars, Monthly Meetups, and a private Facebook group. Throughout the following sections, we share more details about each of these program elements, including challenges and changes made to each, and relevant data regarding student use and engagement.

Individual Appointments

All mentees have the option to schedule an individual synchronous virtual call with any of our mentors using an online appointment system. To create an interactive experience for the mentors and mentees, it is vital to use online technology that functions well for one-on-one conversations and group interactions and is already known to users. It is essential to use technology mentees are familiar with, as using unfamiliar technology can lead

to a poor user experience (Watts, 2016) or even a hesitation to use or learn new technology (Alarbi et al., 2018). Initially, our program used Skype for Business for synchronous calls, but this tool resulted in confusion and frustration for mentees and mentors. To improve the experience, we began using Blackboard Collaborate for synchronous appointments instead. Blackboard Collaborate is already available to all learners across all Walden Blackboard courses, and therefore something mentees and mentors are already familiar with. Since this change, mentors and mentees have reported far fewer difficulties with appointments, allowing students to connect with mentors easily and, as described by Ladyshewsky and Pettapiece (2015), fully experience the media richness the tool provides via its audio-visual capabilities. We have also noticed an increase in attended appointments since beginning the appointment system and switching to Blackboard Collaborate, from 40% in January 2020 to 53% in December 2020. While this data shows us there has been a reduction in the number of mentees not showing up for scheduled appointments following the changes noted above, we continue to discuss potential adjustments to this option to decrease missed appointments further and increase student engagement with this opportunity.

Live Virtual Events

Mentees also have the option to attend live webinars hosted by peer mentors throughout the year. In these live events, mentors share their own experiences alongside tips and strategies on a variety of topics, such as time management, procrastination, and the capstone project. Mentors highlight their challenges and how they overcame them to be successful and answer mentee questions shared within the chat. Since developing and hosting live events where the focus is on the student experience, our center has seen increased engagement and excitement from attendees in the chat, highlighting students' desire to hear from other students. For additional feedback and data on webinars starting in 2021, we have chosen to add poll questions at the start and end of each presentation to capture attendees' feedback about how the session has helped them. For example, for a webinar on finding balance, we might ask attendees if they feel they balance schoolwork and other aspects of their lives. At the end of the session, we might ask students if they learned new strategies to improve their sense of balance. We will be able to adjust presentation content throughout 2021 as we receive feedback from webinar attendees.

Mentees can also attend Monthly Meetups, which are less structured than our live webinars. Each hour-long session has a theme, and mentees can submit questions for mentors ahead of time and ask their questions during the session. The mentors who host

the session spend the hour answering questions and discussing the topics of interest from attendees. When we began hosting Monthly Meetups, we used Adobe Connect as the platform. Although we saw great engagement during the sessions, throughout all of 2019, we had 53 mentees attend the Monthly Meetups, for an average of 4 attendees per month. In August 2020, we moved these sessions to Zoom to allow for a more informal exchange of ideas using video and audio. Since this change, 96 mentees joined the sessions from August 2020 to December 2020 alone, for an average of 16 attendees per month and a total of 144 total attendees for 2020. We cannot conclude a cause-and-effect impact of implementing Zoom, as the COVID-19 pandemic may also have influenced mentees' desire to connect with others due to extended stay-at-home orders throughout 2020. However, regardless of the reason, our optional events throughout the year have allowed mentees to hear real experiences from peers, listen to strategies others use to overcome challenges, and share their own experiences and questions.

Facebook

While we offer many opportunities for connection, social media has been a critical focus for our program. Researchers have found positive results when looking at the impact of social media on various student experiences. Yu et al. (2010) found that online social networking, such as Facebook, positively supported peer relationships and acceptance and fostered a commitment to the

institution among undergraduate students. Similarly, Rockinson-Szapkiw et al. (2014) found that online doctoral students who connected with peers on social media outside of the classroom had a higher sense of connectedness. Previous research suggests that such sharing on Facebook positively impacts connectedness levels, especially in situations where individuals may not be able to interact personally (Köbler et al., 2010). In traditional doctoral programs, informal conversations between peers are essential to feeling connected (Lamar & Helm, 2017). Within our online setting, it appears the Facebook group has become a conversation space that can mimic those informal conversations that happen on campus. Online doctoral learners in this group can build social connections and relationships as they can reach out with questions or share their challenges in a group where they receive timely responses filled with support, advice, and resources from peers and mentors.

Mentees are informed about the opportunity to join our program's private Facebook group when they first join the program and reminded of this space throughout their participation as a mentee. The total group size has grown, in line with the program's expansion, from 248 members in January 2019 to 1004 members in December 2020. In 2019, 31% of mentees who joined the Doctoral Peer Mentor Program opted to join the private Facebook group. As of December 2020, 32% of mentees who joined the program in 2020

opted to join the Facebook group. Group members represent all colleges, as shown in Table 3.

Table 3.

Facebook Group Members by College

College	Student Representation
College of Social and Behavioral Sciences	33%
College of Health Sciences	24%
College of Education and Leadership	18%
College of Management and Technology	17%
College of Nursing	9%

The interactions within the group have also shifted over time. Early in the group, the program coordinator and associate director led most of the conversation by posting encouraging images, event reminders, and helpful resources. Peer mentors acknowledged they were often unsure of what to post within the group and how often to create a new post. This sparked conversations regarding what type of content prompted responses from mentees; a review of posts in the group revealed those conversations that shared humor related to the doctoral journey or quotes and images related to overcoming challenges received the most reactions. This review of posted content and reactions provided information peer mentors could use when thinking about what to share in the group. Additionally, in line with existing research that suggests social media groups should be led by peers rather than staff or faculty

(Rosenberg et al., 2016), we created a daily schedule for peer mentors to share and post in the group. This change resulted in a consistent peer mentor presence in the group, and there was less confusion about how often an individual peer mentor should post. Over time, peer mentors have grown comfortable in this space and helped create a more peer-to-peer space for sharing.

Facebook Group Findings. Mentees have also grown comfortable in the Facebook group as they regularly share frustrations, triumphs, and words of encouragement, resulting in a more peer-led, dynamic conversation. During December 2020, there were 122 mentee-initiated conversations, accounting for 83% of all main posts within the group, compared to only 78 during December 2019 (79% of all main posts) before the changes mentioned above were implemented. In addition to our internal program data, the office of institutional analysis at Walden University completed an analysis of the program to investigate the impact on retention. The institutional analyst found those students who were in the Facebook group had statistically significant higher retention rates than those mentees not in the group, with 91% of mentees in the group retaining to their second term, compared to only 77% of mentees not in the Facebook group. The institutional analyst looked at a full year of the program, and this trend in increased retention was observed through all four terms of study analyzed. These results are shown in Table 4.

Table 4.

Retention of Mentees in the Facebook Group vs. Mentees Not in the Group

	Mentees in Facebook Group	Mentees Not in Facebook Group
First Term Retention	91%	77%
Second Term Retention	83%	65%
Third Term Retention	74%	53%
Fourth Term Retention	78%	51%

Although we cannot conclude a cause-and-effect relationship between joining the Facebook group and retention, these results are consistent with previous research showing the positive impact of social media connections on student retention (see Morris et al., 2010). These findings also align with Tinto's (1975) conclusions about the importance of social integration on student retention, as those within this group can connect and share in an informal space outside of the classroom. Those students who opted to join their peers in this additional social space showed increased retention compared to peers not engaging in this way.

Program Evaluation and Mentee Feedback

Creating a peer mentoring program does come with investments, both in time and money, but based on previous research showing positive effects of such programs (see Clark et al., 2013; Collings et al., 2014; Yomtov et al., 2017) and the data and feedback collected so far for our program, they are worth the investment. As shared in the previous sections, we have made several changes to the program based on research and internal program data, which is an essential

component of any program (Culp, 2005) and has been a strength of ours. Beyond data shared in previous sections, mentees have shared their feedback and experience through program surveys. Since the program's launch in 2018, the program coordinator has distributed surveys to all mentees at the end of each term that contains both Likert-scale questions and open-ended questions. A summary of quantitative feedback from distributed surveys is provided in Table 5. Although most respondents shared positive responses, some mentees disagreed or strongly disagreed with some of the Likert-scale questions and shared additional feedback in later portions of the survey. Some mentees wanted a more personal connection with a peer mentor beyond email, others shared that live events conflicted with their personal schedules, while some noted they did not have the time to interact with their peer mentor. Some of the concerns shared are ones we can work to address, and, in some cases, we have already taken initial steps to better support mentees. For example, we have started offering more live events per month on different days of the week and at various times, to try and accommodate different schedules.

Table 5.
Mentee Feedback - Program Survey Results

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel supported by my peer mentor	7%	8%	11%	35%	38%
I feel connected to Walden University	5%	7%	12%	42%	34%

In addition to this feedback, mentees also shared positive experiences and suggestions. In that open-ended space, one mentee wrote: "my mentor is engaged, responds proactively and provides valuable insight. I appreciate their encouragement as well." Another mentee shared: "my mentor was there for me and helped me realize that the path to completing my doctorate was to be completed as a journey and not as a race." Based on this feedback, it is evident that mentees value the peer mentor relationship and are building connections. In some cases, the experience of a mentee in the program can motivate them to seek out a peer mentor position later in their journey, indicating a desire to continue building connections, as demonstrated by this mentee's feedback:

> Just having someone in addition to my family that is in my corner cheering me on has been a big benefit to me. It causes me to want to be involved in being a peer mentor after I have progressed some more in my program.

This mentee is not alone in their desire to serve as a peer mentor, either, as five of the current peer mentors were previously mentees; they found value in their experience and wanted to pay it forward to other new students. These responses represent a small sample of mentee feedback, but they highlight the potential positive effects of such a peer mentoring program. Not surprisingly, the positive feedback and the mentee retention results sparked interest from other program level leadership at Walden to include peer

mentoring at the undergraduate level which not only provides new students a mentor, but undergraduate students the opportunity to apply for peer mentoring positions. Although the creation of a new peer mentoring program requires time and new staff members, the potential influence on online students' experience, as exhibited in the mentee feedback above, is worth the time and effort.

Conclusion

Social integration for new online doctoral students can significantly impact the student experience per Tinto's (1975) institutional model of departure. It is critical for administrators in online higher education to create programs that foster an environment for connection, a sense of community, and a support network to strengthen the bond an online adult learner has with their doctoral institution. To encourage connections, we have designed multiple avenues for mentees to connect with mentors and peers. Throughout all of the interaction mediums offered to mentees, there is a focus on helping new students become connected to others and the institution, thereby supporting learners' social integration. Through the Doctoral Peer Mentor Program, we hope mentees will form a network of support that will nurture their social needs as they start, progress, and complete their doctoral journey.

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