

*Investigating the Impact of Technology on Adult Learners in a Distance-Education
Mentoring Program for Women Leaders*

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Abstract

In this qualitative study, the researchers examined the usefulness of certain technologies [e.g., Zoom, National Center for Faculty Development and Diversity (NCFDD) webinars/workshops, Google Drive, and WhatsApp] utilized during a two-year distance-education based mentoring program for adult learners enrolled in graduate school in the southern United States called [Wo]Mentoring. The [Wo]Mentoring project is a competitive, grant-funded program designed to support adult graduate students exploring future leadership positions both in academia and in industry. Data collection consisted of analyzing written responses to four sets of online surveys/reflections about the program from Fall 2021, Spring 2021, Fall 2022, and Spring 2023 Semesters. Findings included reflections related to certain technologies and their utilization during the online program, as well as implications for developing mentoring and leadership projects. Future research and iterations of the program with current modifications to technology components will be discussed.

Keywords: Mentoring, Higher Education, Technology

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Introduction

In the past few years, the world of academia has changed dramatically. COVID-19 altered the landscape of what the world looks like and caused many of us educators to examine whether the way we have always done things was the best way. This not only includes teaching differences but also mentoring.

Recent online mentoring programs have taken various forms, such as teenage girls learning to grow in self-confidence and career skills (Noronha et al., 2021); pre-teen, teenage, and young adult females learning about STEM (Uebler et al., 2023); undergraduate Dental students growing in their knowledge of academics and psychological help (Veerabhadrappe et al., 2020); doctoral students learning to navigate their program of study (Duffy et al., 2018), and novice online college instructors learning from experienced instructors (Lowell & Yang, 2023) to name a few. In the realm of mentoring at the university level, there are many ways in which one could mentor an individual, whether it be with just faculty or some combination of faculty and undergraduate and/or graduate students (Lunsford et al., 2017). Typically, prior to the pandemic, these mentoring opportunities were conducted in-person with connections being made between one another over coffee and/or food. Now, we, as educators, have seen how virtual meetings have given us the opportunity to not only change the way we teach but the way we can mentor students in meaningful and sustainable ways that we may never have thought of prior to the pandemic.

Various technologies like Zoom or MS Teams became vital to our profession. Even though we may have been resistant to this change, we utilized them in newfound ways, included them in our mentoring obligations, and then pondered how our mentees felt about their effectiveness. Thus, the purpose of this research study was to answer the following research question:

What types of technologies did graduate students involved in a two-year online mentoring program focused on leadership find useful to their learning?

Methodology

The participants for our study were graduate students who applied and were accepted to a two-year online mentoring program that focused on leadership at a doctoral granting university in the southern United States. Six participants were enrolled in the program with four accepting to take part in the research.

As part of the program, the graduate students completed various online tasks. Every month (September–May), mentees completed written reflections they uploaded to their shared Google Drives about professional development content they took part in on the National Center for Faculty Development and Diversity (NCFDD) website. At the end of each semester (December and May), graduate students completed semester updates that consisted of questions regarding their feelings about their work and their progress in the program. Mentees also attended Zoom meetings (two times per academic year) with the PI and co-PI of the program to discuss progress with their projects, present their preliminary findings to the group, and/or listen to graduate student mentors discuss their own research.

For this study, we examined the responses to the four reflections/surveys of the four graduate students who signed the informed consent. Each survey included questions about what the

graduate students learned through their time in the program. Specifically, the Spring 2023 survey focused on the technology components (e.g., NCFDD, Zoom) that the mentees utilized during the span of the two-year program. In the following pages, we will outline various technologies used in the program and how the participants felt about their effectiveness in helping them grow as learners and professionals during their time in the mentoring program.

Findings

Zoom

The most versatile technology tool used during the mentoring program was Zoom. As Neville and Outka (2020) point out, “virtual mentoring save[s] time and allow[s] flexibility in scheduling meeting times.” All students stated that the Zoom components of the program were useful. Zoom meetings provided three main avenues of communication for graduate students: with the program directors, their mentors, and each other. For example, three of the participants described how they enjoyed learning about each other’s research during the quarterly required Zoom meetings. The participant’s response below was the typical sentiment felt by the mentees:

The Zoom sessions were helpful in learning about everyone's work and how a diverse range of issues can be addressed through interventions. It was informative to learn about the different projects in the program and how each participant's relationship with their mentor had helped progress their project. Additionally, it was interesting to see what mentors were working on as well.

In addition to the required quarterly Zoom meetings, the mentees established their own Zoom schedules with their mentors and with each other. Zoom allowed the mentors and mentees more flexibility working together to schedule meetings even across different states and different locations within the same state. One participant commented on the value that these meetings provided to them:

“Our cohort used Zoom to meet outside of the normal [Wo]Mentoring sessions. As a group, we came up with times and days to meet on our own, so that could be a suggestion for future cohorts. It was good to meet with just the other mentees a lot; it created a supportive, safe space for us to communicate.”

NCFDD Website

Besides Zoom, all students found the NCFDD content, such as self-care and improved time management content, to aid their learning and overall well-being. “NCFDD provides on-demand access to the mentoring, tools, and support needed to be successful in the Academy” (NCFDD, 2023). The self-paced courses and live webinars with chat features allowed participants various forms of learning and interactive engagement, if they so choose. In the spring 2022 Google Form, one participant discussed how access to on-demand videos “provided a lens outside my scope of practice,” while another expressed the great value, they felt the NCFDD resources afforded them in their future career:

“My favorite part of our experience are the NCFDD webinars. I've found these to be really helpful in understanding how my culture and race play a pivotal role in my

career and education. I feel as though they are preparing me for some of the challenges I will face when I become an educator.”

These sentiments continued through their second year of the program. A representative response of how the graduate students felt during the Spring 2023 is expressed below:

“NCFDD has taught me about the many ways that scholars can share their research with the public outside of academic journals. NCFDD has also taught me ways to be inclusive when teaching and/or being a mentor to others. Furthermore, I have also learned a lot about ways to be organized and stay consistent with my writing. I enjoyed the program a lot. I learned information that I feel I otherwise would not have gotten just in my normal coursework. It was really easy to navigate, and I liked that I was able to choose the webinars I wanted to watch.”

Even though the graduate students felt the program was useful, two of the graduate students also commented that NCFDD videos did become repetitive when they were asked to follow the content over the span of the program.

Google Drive

Participants had mixed feelings about using Google Drive in order to organize their materials. All graduate students considered components of using Google Drive as being useful, but one found it difficult to organize all the different assignments required by our program. Another stated they wished they had a platform with calendar updates such as Google Classroom to keep track of the deadlines that were part of the mentoring program. One stated that they felt that the Canvas Learning Management System might have been more useful than Google Drive since our university utilized Canvas and all students already knew how to navigate that technology, thus eliminating the need to spend time on mastering yet another app/program.

Presentation Applications

As a requirement of the program, all graduate students were to present to the group at least twice per academic year. Each spring semester, the participants also presented at the university’s annual undergraduate research conference. All participants stated they utilized PowerPoint for creating their presentations. Three of the participants also used Canva as part of their presentations. The graduate students liked the variety of slide designs they were able to use in Canva. One participant decided to use Google Slides as a way to make their presentation more interactive and engaging.

WhatsApp

Even though not required as part of the program, the participants decided to use WhatsApp to communicate with each other via a backchannel that did not include their mentors. The graduate students enjoyed being able to stay connected with each other, and they were all intrinsically familiar with the app. As one student stated, “A good line of communication [by using the app] among mentees made me feel like a cohort and allowed us to support one another.”

Conclusion

From our insights, one can conclude that certain technologies in online mentoring programs can definitely be found useful by the participants, provided they do not add too much of an extra burden to their already limited time. These digital tools cannot only be prescribed for mentoring work *per se*, but can also be organically utilized to provide great benefits in other areas, such as making mentees feel closer to one another and supported in ways that they would not otherwise feel in such a setting.

Even though in the past we might have not considered the benefits of using an online platform for mentoring as a valid substitute for meeting face-to-face, the advancements made in technology have furthered the appeal of such a route of mentorship. We plan to seek out additional forms of technologies to make our program even more successful (e.g., using Google Classroom), so that we have a common space for mentees to find assignments, upload homework, and communicate with each other all in one place and with all the amenities technology has to offer. We also plan to look for and disseminate free online videos, tutorials, and recordings from Ted Talks and Google Podcasts to provide our participants with more resources that can be utilized even beyond the end date of their mentoring program.

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