

Chapter 1

“We Are Teaching and Learning with Each Other”: Improving Mentoring in Higher Education through Ongoing Training

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Abstract

This article examined ongoing mentoring training. This qualitative study analyzed interview responses from 20 mentors from 13 international locations in a global higher education initiative to determine how ongoing training affects mentors' abilities to assist higher education students in achieving their educational goals. The study results showed the benefits from ongoing mentoring training, including mentors better understanding their roles and responsibilities, mentors gaining knowledge, and mentors receiving ongoing support. Results also showed the importance in ongoing mentoring training of volunteer mentoring needs and mentoring training creativity. Furthermore, the study showed that ongoing training positively impacted mentors, that it identified contributing mentor volunteers, and that ongoing training advanced effective mentoring practices. The study also contributed findings to the literature including that mentors themselves contributed to best training practices, volunteer mentors may need more mentoring training, and ongoing mentoring training showed global transferability. As institutions of higher education take greater initiative and demonstrate innovation in providing structured ongoing training for mentors, mentors can be more

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knowledgeable and confident in their mentoring skills and students will have increased opportunities for success.

Implications for practice or policy:

- COVID-19 highlighted the need for effective mentoring in higher education.
- There is potential for transferability of mentoring training practices in global organizations by higher education leaders.
- The study recommended identifying opportunities for developing creative and improved best practices in mentoring, such as mentor-to-mentor training sessions and just-in-time WhatsApp training.
- Volunteer mentors may have unique needs to consider in mentoring programs.
- Best practices will also include strengthening mentor confidence, understanding roles and responsibilities, and providing answers to mentor questions.

Keywords: best practices, mentor, training, volunteers, qualitative

Introduction

Mentoring for higher education students continues to be a priority for colleges and universities as they seek to increase retention and improve the student experience at both traditional and online institutions. Mentors fill an important role for college students as they provide opportunities for transformational learning with long-lasting benefits that impact their lives beyond college (Bettinger & Baker, 2014; Ragins & Kram, 2007). The Council of Graduate Schools provided Zelditch's (1990) definition of mentors and how they contribute to the student experience,

Mentors are advisors, people with career experience willing to share their knowledge; supporters, people who give emotional and moral encouragement; tutors, people who give specific feedback on one's performance; masters, in the sense of employers to whom one is apprenticed; sponsors, sources of information about and aid in obtaining opportunities; models, of identity, of the kind of person one should be to be an academic. (As cited in Gaffney, 1995, p. 1)

As they seek to help students in these roles, mentors also serve as role models for students and provide encouragement as they navigate their educational experience (Jacobi, 1991; Nora & Crisp, 2007). As educational advisors instead of educators, they do not provide academic instruction, grades, or scholastic evaluations for students, so they are able to support students' progress and development without pressures related to academic performance (Rees Lewis et al., 2015). The impact of COVID-19 on higher education and the sudden change to online learning has further highlighted how critical effective mentoring is for students in times of uncertainty (Considerations for Institutions of Higher Education, 2020). Mentors play an important role in the lives of students, but just as they help students achieve transformational learning in their academic experience, mentors also need help to reach their own highest potential and effectiveness in their mentoring role.

Mentor Training – The Key to Success

Mentor training has been referred to in academic literature as “the key to success of mentoring programs” (Ehrich et al., 2004, p. 535). That success or failure depends on what training is given, how often, and how it is received by mentors. Mentor training can cover a range of goals depending on the program, including familiarization with the sponsoring organization, technology training, and improving overall mentoring skills. Ideally, mentoring training is ongoing and emphasizes leading approaches (de Metz & Bezuidenhout, 2018). Cultural and diversity training also provide mentors with a better understanding of and empathy for all students (Butz et al., 2018; Castellanos et al., 2016). Mentor training should help students plan for the future through professional development and establishing a vision for their post-college life (Poor & Brown, 2013; Renn et al., 2014; Smith-Ruig, 2014).

As valuable as mentor service can be to student success, tools for innovative and effective mentor training are not well researched in academic literature. In a study of over 300 academic articles across three disciplines, more than 15% of articles cited lack of training as a concern (Ehrich et al., 2004). Without necessary training, mentors may not fully understand their role or how they can best help students (Bear & Jones, 2017; Bowser et al., 2014; Kramer-Simpson, 2018). They may not know where to go when they need help. They may need to learn new skills of mentoring technology (Homitz & Berge, 2008). Without resolution to their problems and concerns, they may not choose to remain as mentors for a long period of time. Mentor training can

minimize some of these challenges as they arise. Training prior to or in the beginning of the mentoring process can help establish common understanding and goals between mentors and students as they start to work together (Anderson et al., 2014; Behar-Horenstein et al., 2010; Sanyal & Rigby, 2017). Mentor training may occur in person or online, synchronously or asynchronously, or individually or in groups to optimize the learning experience.

Research offers several possibilities for what mentor skills to teach, but mentoring instruction could include basic student advising or skill specific advising, providing understanding about educational programs and helping students learn where to find school resources when they have questions, and student goal setting and future planning (Henry et al., 2011). In addition to teaching traditional mentoring skills, more structured mentoring programs may add to mentoring by teaching skills such as student acceptance, support, and empathy (Lunsford, 2011; Martin & Bok, 2015; Mondisa & McComb, 2018). Providing training skills may also help advisors better understand individual student needs and how mentoring approaches can support those needs (Braun & Zolfagharian, 2016). Diversity and gender training were also recommended to improve mentor understanding of and interaction with students (Butz et al., 2018; Castellanos et al., 2016; Dahlvig, 2010).

Mentoring and Ongoing Training

Even less researched than initial mentor training is the topic of ongoing training for higher education mentors. What this ongoing training provides and how often the training occurs depends on the program and on mentor and student needs. However, what seems clear from the research literature is that ongoing training is very rare. In Jacobi's (1991) foundational article on mentoring, she identified eight authors who had provided original definitions on mentoring. Of those articles, six of the eight authors had referenced training, but not specifically ongoing training. Over 20 years later, Gershenfeld (2014) categorized published academic studies from 2008-2012 that identified mentoring support in undergraduate mentoring programs. Of these 20 program study descriptions (Gershenfeld, 2014, Table 3), only two studies cited "ongoing support" in the study (Gershenfeld, 2014, pp. 378-379). However, the ongoing or follow up training in these studies referred to peer mentoring, and not the classic senior mentor/junior protege mentoring definition (Lev et al., 2010).

In another article, Dawson (2014), reviewed how 16 mentoring concepts are explained in the literature and reviews two mentoring models: Supplemental Instruction and Peer Assisted Teaching Scheme. Although both models recommended an initial training session, Dawson stated, “Neither model incorporates ongoing training, although this is present in some other models” (p. 142). Dawson (2014) did not reference additional information about the other models. These most recent literature reviews seem to show that academic studies have not made significant progress in advocating for ongoing mentor training practices and documenting any effective change or successful practices resulting from mentor training.

There is a large body of literature regarding ongoing mentor training and youth mentoring (DuBois, Holloway et al., 2002; Karcher, 2008; Miller, 2007; Osterling & Hines, 2006; Rhodes et al., 2009), but the ongoing mentoring training studies seem to end when the students leave for college. While not explicitly stated, these articles provide additional support for the important need for ongoing mentor training in higher education, but other than age of students, the research is silent on why there is such a significant difference in discussion of the topic once the students have moved from high school to university studies.

The Value of Ongoing Mentoring Training

Despite the lack of research on the topic, it is clearly important for mentors to have regular, ongoing training after an initial training (Butz et al., 2018; de Metz & Bezuidenhout, 2018; Mondisa & McComb, 2018; Raposa et al., 2017). Butz et al., (2018) advocated the importance of ongoing cultural and diversity training so that mentors can better understand why they may or may not discuss certain issues with minority mentee students. In contrast, Martin and Bok (2015) argued that ongoing training for racial and cultural issues may be too costly for mentor programs when the outcome is not likely to positively influence mentor approaches. They suggested selection of more open-minded mentors was a better alternative. Training can help advisors adjust their advisement style to student needs and expectations, increasing student satisfaction with the mentoring experience (Anderson et al., 2014).

As mentors begin their interaction with students, they will have questions arise and may find themselves in scenarios not covered by the training. However ongoing training benefits still outweigh the potential negatives (Henry et al., 2011). Ongoing training provides an opportunity for mentors to

ask questions, resolve concerns, receive direction from mentor program coordinators (if applicable), and share experiences with other mentors. Ongoing training allows mentors to stay current with any program or university changes. Ongoing training also helps program representatives develop a relationship with the mentor and provide feedback. This relationship can encourage mentor retention as mentors feel valued and appreciated by the mentoring organization, resulting in an increased commitment to their volunteer mentoring positions (Raposa et al., 2017).

Types of Mentors and Ongoing Training

Types of mentors can influence what kind of ongoing training is most needed. Types of mentors in a mentoring program could include volunteer mentors, paid mentors, peer mentors, senior mentors, internal mentors and external mentors, among other possible mentor types. Volunteer mentors, in particular, are in need of training as they are often less experienced or familiar with the mentoring environment. Many volunteers do so because they asked (Nesbit, 2013). Volunteer mentors may need to be recruited to participate as mentors in a mentoring program. In a study conducted by Poor and Brown (2013), the mentoring program invited all alumni to volunteer and participate as mentors, and many did. While there may have been some oversight by the university mentoring program, these were self-selected volunteers, and the study did not indicate additional mentoring training.

Training can also contribute to volunteer retention. As much as universities focus on student retention, organizations are more likely to retain volunteers as they look to recognize and value the volunteer experience (Hager & Brudney, 2008). Training and efforts to help volunteers develop career skills can improve their experience in the organization and encourage them to continue in their volunteering efforts. Hager and Brudney (2008) explained an effective way to keep volunteers: “Our study shows that [organizations] that adopt the practices most directly concerned with satisfying volunteers reap the highest rates of retention” (p. 26). In addition, as an organization, volunteer programs can support volunteer retention by providing necessary funding for volunteer programs, encouraging a culture that supports volunteers, providing meaningful experiences for volunteers, and fostering recruitment for new service mentors (Hager & Brudney, 2008).

Program administrators need to carefully consider how training will be conducted for both maximum efficiency and cost effectiveness. For example,

who will be the most successful in training the mentors with the skills and tools they need to learn? Program leaders must ask if an internal coordinator is best qualified to train mentors or if an outside trainer would provide better instruction (Ehrich et al., 2004). Cost is also a consideration in training mentors and may be one of the reasons research studies show initial training, but not follow up training (Martin & Bok, 2015).

Challenges of Ongoing Training

There are logistical challenges to ongoing training for mentoring organizations. After conducting an initial training, it may be difficult to organize mentors for ongoing training meetings. If mentors are satisfied with their interactions with mentees, they may not feel the need for additional training. Volunteer mentors may feel like they are already giving their extra time to the mentees and may not want to spend additional time in training.

There is also the consideration of who will train the mentors. Mentor programs and universities can face turnover that makes it challenging to manage training processes (Putsche et al., 2008). Turnover can also lead to a lack of documentation for mentoring training that has taken place (Putsche et al., 2008). If program administration is not consistent, paperwork on who has been trained, what training they have received, and training plans for the future may be compromised.

Ongoing technology training can also be problematic. Mentors may have to learn new technology or program-specific technology for which they need regular training (Ensher et al., 2003; Shrestha et al., 2009; Williams et al., 2012). With the COVID-19 immediate transition to online classes, higher education instructors faced significant challenges to adapt to online or remote learning strategies (Cahapay, 2020; Thompson & Lodge, 2020) and mentors may face similar difficulties with technology. If ongoing training does not occur, the mentors may not use the technology and may not be able to help their mentees receive all possible mentoring benefits. If mentors lack confidence in their technology or other skills due to lack of ongoing training, they may also be less likely to be fully participative in their mentoring role (Williams et al., 2012).

Implications for the Current Research and Research Question

Throughout mentoring literature, training is identified as important to mentor success (Braun & Zolfagharian, 2016; Renn et al., 2014; Smith-Ruig, 2014). Current research does not provide enough data or recommendations for how ongoing mentor training should occur. Without a research foundation for ongoing mentor training, more research studies like this study need to be conducted to show the effects of ongoing training on mentoring practices and to provide practical implications for facilitating this additional training for mentors. This study will add to the research on ongoing mentor training and will provide additional insights about how mentors use their training to help students. The research question for this study is:

How does ongoing training affect mentors' abilities to assist higher education students in achieving their educational goals?

Methods

Research Context and Study Design

To answer this research question, the authors studied BYU-Pathway Worldwide ("Pathway"). Their educational program, PathwayConnect, is a rapidly expanding low-cost higher educational initiative that helps students begin or return to college (BYU-Pathway Worldwide, 2019). In 2020, PathwayConnect was offered in more than 500 locations in 152 countries and in all 50 states of the United States (BYU-Pathway Worldwide, 2021). The program currently enrolls more than 33,000 students worldwide. Once students have completed three semesters (one year) of PathwayConnect, they can receive a completion certificate and then finish an online degree at a college or university or leave with better job options. The volunteer service mentors facilitate the weekly Pathway meetings, support Pathway students, and are critical to the students' success in the program.

Pathway's vision to use volunteer teams of service mentors for students provides a unique learning atmosphere where students feel increased support and connection. Pathway service mentors are volunteers and much of their learning about mentoring depends on self-training. Pathway's sponsoring religious organization provides the eligible volunteers around the world to serve as full-time and part-time service mentors in the program. The mentors

have a common value system and faith with many Pathway students (but not all students) and an expectation for “shepherding” or caring for students in their Pathway groups, or mentoring to their individual needs.

A characteristic of the Pathway program is the weekly academic *gathering* event (student meetings). One day a week, in Pathway locations worldwide, volunteer service mentors facilitate the Pathway weekly gatherings, where students meet online or in person. In these groups, students teach each other and discuss their weekly learning assignments. Pathway service mentor locations include domestic groups, international groups, and online groups. There are two versions of PathwayConnect: a *standard version* for students who speak English fluently and a *language version* for students who have intermediate English skills.

The Pathway context is an excellent opportunity to study ongoing training. In 2020, the large-scale learning initiative enrolled more than 33,000 students. At the time of this study in 2019, there were more than 26,000 Pathway students, assisted by 2,500 mentors. Pathway students are particularly in need of mentoring as the program is designed to help prepare those who may not be ready for college or those who are returning after an absence. Finally, the mentors are volunteers, and thus not typically educational professionals with a background in educational tutoring/counseling, and thus training is very important for them.

Because the research questions are qualitative in nature, and because the population being studied is diverse, and has perspectives and experiences to share that will inform the research question, a qualitative interview approach was appropriate. Qualitative research is also “interpretive, experience based, situational, and personalistic” (Stake, 2010, p. 31). This research study reflects a qualitative process based on theoretical assumptions to examine a designated social phenomenon (Creswell & Creswell, 2017), in this case ongoing training and mentoring practices in higher education. The richness of qualitative research and interview data (Dahlvig, 2010; Rabionet, 2011) also provide insight and themes regarding the benefits and challenges of ongoing training.

Participants

The participants were volunteer service mentors (“mentors”) in the Pathway Worldwide program. They serve as mentors for an average of a period of two years or longer. The Pathway mentors in this study had served as mentors since at least April 2019. Most mentors in this study served with a spouse, but some

served with another mentor in a mentoring team. In some circumstances Pathway mentors served alone.

Mentors vary in their permanent residence location. Some mentors were from the local areas they served in. Other mentors had been asked to volunteer in locations far from their homes. They are expected to contribute approximately two to three hours a week to Pathway service, although mentoring time may vary depending on class size and needs, and location circumstances. The volunteers come from various backgrounds, and had relevant life experience, but there are not specific professional requirements to serve as a mentor. In this study, 50% of mentors were previous Pathway students. All participants spoke English for the Pathway program requirements. Some mentors spoke English as a second language.

For this study, there were at least two participants from each of the seven international Pathway areas (see Table 1). Twenty mentors, 10 women and 10 men, were interviewed in 13 countries. Mentors were almost evenly divided in length of service. Thirty-five percent had served more than two years, 35% had served at least one year, but less than two years, and 30% had served less than one year as mentors. Of the mentors interviewed, 80% received some form of ongoing training after their mentoring service began. For the purposes of this study, ongoing training was defined as one or more instances of training after the initial training. The researcher continued to interview additional mentors until theoretical saturation was achieved.

Table 1. Study mentors

Pathway International Area	Area Number	Mentors Interviewed
Africa, Southeast Africa West, Middle East Africa, North Area	Area 1	2
Asia, Asia North Philippines Area	Area 2	4
Brazil	Area 3	2
Caribbean and South America, South Area	Area 4	2
Europe and Pacific Area	Area 5	4
Mexico Area	Area 6	3
South America Northwest and Central America Area	Area 7	2

Data Collection

Data collection consisted of qualitative interviews conducted from August-October 2019. First, the researcher conducted a pilot study survey in January

2019 (never published or approved for publication by an IRB) with approximately 500 Pathway volunteer mentors to better understand organization training practices. For the current study, the Pathway organization provided the researcher with contact information for the potential study participants. The researchers received IRB approval from the sponsoring institution for the interview study. The mentors were randomly selected and emailed regarding participation in the interview. Mentors who agreed to be interviewed arranged a time to speak with the researcher by Zoom call (Version 3.6.5; Zoom Video Communications, Inc.; 2019). The purpose of the interviews was to understand how ongoing training affected mentors' abilities to assist higher education students in achieving their educational goals.

In the interview, all participants were asked questions in a semi-structured format. Some married mentors were interviewed together and one or both participants had the opportunity to respond to each question that was asked. Interviews were recorded on the researcher's computer. Interview data was professionally transcribed by a third party for analysis and stored on the researcher's personal computer. The researcher continued to interview mentor participants until the data reached theoretical saturation.

Data Analysis

After the data was collected and transcribed, data was analyzed using a holistic and interpretive stance with an emphasis on key themes (Braun et al., 2019; Spradley, 1979; Stake, 2010; Yin, 2017). Based on the Stake (2010) coding method, data was sorted and classified by major categories related to the research question. In repeated analyses of the data, additional themes emerged from the categories. As themes emerged, they were sorted and resorted for additional understanding, and topics and subtopics were identified. These topics and subtopics were organized into key themes. The comprehensive analysis and study discussion and findings resulted from further analysis and synthesis of all the interview data.

Trustworthiness

This study relied on Guba and Lincoln (1994) recommendations for trustworthiness for increased credibility of data analysis. First, the researcher interviewed a diverse sample of service mentors from locations around the

world. This sample provided diversity for participant response data. For member checking, interview themes were reviewed and verified with Pathway administrators for meaning and clarity using verbal confirmation. This review ensures that information presented is correct in light of the broader context of the Pathway organization and goals, without biasing the research by too much management involvement. These administrators have the strongest understanding of the Pathway program and were best positioned to provide insight into whether the researcher fully understood the participants. The findings and the participants' responses were also sent to the original participants to determine if they agreed with research interpretations. For peer debriefing, findings were reviewed and discussed with colleagues and peer scholars. An academic colleague also reviewed and coded some of the interview data for comparison with researcher results. Based on the peer debriefing coding outcomes, adjustments were made to the study analysis to bring unity to the overall assessment of responses.

For negative case analysis, interview responses were compared to existing Pathway data, including the January 2019 pilot study conducted by the researcher, for potential differences in results. After completing the analysis, the researcher coded approximately 20% (325 responses) of the text responses from the submitted pilot data, specifically seeking to find areas of disagreement with the study framework. The researcher recorded all disagreements and contrary evidence in a research journal. Next, findings and categories were evaluated in consideration of any contrary evidence. Then the researcher provided the contrary evidence and overall findings to a peer for debriefing in order to better understand the overall fit of the conclusion to the data.

Limitations

While a random selection of international in-person mentors has been interviewed for this study and the ongoing training examples are representative of the sample group, in a rapidly expanding global education program, ongoing training experiences for mentors will be different. With more than 2,500 mentors in both in-person and virtual Pathway, many different mentor experiences existed in the program. Ongoing training experiences may be different depending on the mentoring area, method of mentor participation (in-person or virtual), mentor background, training received, and students mentored.

Mentor training experiences were different depending on age, location, gender, nationality, ethnicity, educational and professional background, mentor partner, and other factors. While many Pathway student needs were common to the responsibilities of a higher education mentor and could be standardized in ongoing training, some needs were unique to the areas and countries where the students lived, and individual student needs were different in every class. Pathway mentors were expected to serve through two one-year cycles of three Pathway semesters, but circumstances did not always accommodate that expectation. The Pathway course structure was regularly being revised to better meet the needs of students and mentors around the world. With course and technical changes from one semester to the next, regular ongoing training for all mentors was critical, but that same type of mentoring training might not have been as important to an educational program with fewer changes.

Also, this higher education program has religious principles as part of its core principles and training. Similar values may not apply to other higher education programs. Mentors’ volunteer service and commitment to Pathway as part of their religious service may not be transferable. Pathway mentors and students may also have a stronger mentoring connection because of the shared religious commitment many have.

Limitations for this study also included that the interviews were conducted in seven international areas in 13 different countries. Poor internet connections to remote areas of the world did not always allow for as clear communication in a Zoom interview as would have been available in an in-person interview. Although all mentors spoke English—a Pathway requirement with all classes conducted in English—some spoke English as a second language. While all mentors were able to express their opinions, their ability to fully express opinions in English or understand and answer questions may also have limitations in the study. Language expression concerns were mitigated by restating or clarifying questions and answers.

Results

This study examined how ongoing training affected mentors’ abilities to assist higher education students in achieving their educational goals in an international educational program. Study results showed what percentage of mentors received training, what training was received, why the mentors liked or disliked training, and how the training helped them mentor students. Based

on the results of the interview coding and analysis, three main themes emerged that showed the benefits of ongoing training for mentors: (a) benefits from ongoing mentoring training, (b) volunteer mentoring needs, and (c) mentoring training creativity. These themes are described in the subsequent results.

Benefits from Ongoing Mentoring Training

Eighty percent of the mentors in the study had participated in ongoing training since beginning their service in the mentoring program. While the content, delivery, methods, and frequency of training differed from area to area, 90% of mentors requested additional ongoing training opportunities. The results showed that mentoring training benefits included: (a) mentors better understood their roles and responsibilities, (b) mentors gained knowledge, and (c) mentors received ongoing support.

Mentors Better Understood Their Roles and Responsibilities

One outcome of the training was that the mentors better understood their role as a mentor. The ongoing training helped them realize their role was to encourage and support the students, including to help them find the program resources they needed. A mentor from Area 2 said, “I am not supposed to be enabling them. I am supposed to be helping them become more self-sufficient.” Training helped the mentors understand what their responsibilities were with the students and gave them tools to provide better guidance for them. Another mentor explained how critical the mentoring training was to understanding her role to support students,

[I have] been a mentor to the students in encouraging . . . them and making sure that . . . they felt safe in . . . the class What I took from the training [was] my role because I didn’t want to lose any of the students.”
(Area 5 mentor)

Having training also helped mentors feel valued in their mentor role as they supported students.

Mentors Gained Knowledge

Another purpose of the ongoing training was to update mentors on curriculum or program changes, or to provide them with important program notifications for their students. With a constantly expanding and evolving educational

program, regular updates were important to help mentors and students feel confident about student progress and mentor responsibilities in the program. These updates were shared through the live Zoom group or one-on-one training that depended on the area, and also through weekly email updates that were sent to mentors worldwide. Mentor reviews on the program update training meetings were mixed. One Area 2 mentor described the ongoing training meeting as “[an] update on policies . . . to me it’s not counted as training.” However, this same mentor recognized the importance of having program updates, “If there is some interesting feature or something that can help a future student to be attracted to . . . Pathway . . . [or] it’s the latest policy about Pathway . . . those kinds of changes, I should know about through training” (Area 2 mentor).

An Area 1 mentor described the informational training positively in that it “gives . . . knowledge and helps you . . . [know] . . . new information.” This mentor felt like a 6-month update was appropriate for new information. The weekly email updates that were sent to all mentors also received positive and negative feedback. An Area 6 mentor said, “The updates needed more explanation and information.” An Area 5 mentor suggested that the weekly updates should contain information that applies to mentor training in addition to the student issues that would benefit the mentors as well as the students.

Mentors Received Ongoing Support

Ongoing training provided an opportunity for Pathway mentors in this study to ask questions and have their questions answered. These question/answer ongoing training opportunities occurred in Zoom and in-person group meetings with other mentors. They also occurred in formal and informal interactions between mentors and their supervisors. A program support line was also available for all mentors to ask questions.

In the group training sessions, mentors could ask each other questions and “[if] we needed questions answered, [program representatives] were there to answer” (Area 6 mentor). Ongoing training sessions that allowed mentors to ask questions and answer the questions mentors want to know helped mitigate concerns. One Area 3 mentor said, “I was very anxious [about my responsibilities]. So when I got the training, I had my questions, and I [had] my worries, [but] everything was solved during that conversation.” In another training, the trainers showed the mentors where to find the information they needed, “and then we were able to go and do it by ourselves” (Area 4 mentor).

Mentors were provided with organization or local representatives as a resource, and mentors who referenced them as a training resource indicated

that they were helpful at answering their questions. These training contacts provided support and answers for additional questions that occurred between trainings as a mentor in Area 2 shared, “There are some things that I don’t understand, but I . . . emailed my . . . [representative] right away and then [asked] them whatever I need to do . . . They . . . [answered] my question right away when I asked them.” An Area 4 mentor expressed appreciation that the representatives were available to answer questions mentors didn’t find online and an Area 7 mentor said his area manager was able to answer his questions “1000%.” It was important for mentors to have resource support to answer their questions and especially the many questions from students.

Volunteer Mentoring Needs

Pathway volunteers were similar to volunteers in other organizations, and they needed the program background provided by the ongoing training. While 50% of participants had been previous Pathway students, improving their understanding of the program, their role as a Pathway missionary was a volunteer position. An Area 7 mentor explained, “Training is [very] important. [Pathway is] a volunteer job—not something you get paid for . . . It would be very problematic if there [was] no training.” Mentors wanted to feel prepared for their mentoring responsibilities and how to most effectively help students. An Area 5 mentor said, “[As volunteers,] we want to feel confident.”

Several of the volunteer mentors had opened new chapters of the Pathway program in their cities, and for some it was the first chapter in their country. Training was particularly important for these mentors because they were establishing the program in their area and setting the pattern for how the program would run. An Area 5 mentor explained the difference in being a volunteer and being an employee as he established a new Pathway educational program in his area, “If you’re an employee, you’re in a formal structure and so you would probably . . . have a manager or you have someone you report to . . . If you’ve got problems, you know who to report to. Whereas here, as volunteers, we report to other people who are volunteers who eventually report to someone who is an employee. You might not have formal links [in place so] . . . maybe the information doesn’t come.” An Area 3 mentor further explained the challenges of being a volunteer, “[Some] may think, if] you’re a volunteer, do your best and that’s enough. I don’t think that’s enough. I think if we [had] a formal training . . . we could be better because we would know exactly what is expected of us.”

Volunteers juggled responsibilities as they tried to balance their mentoring assignment to students with personal responsibilities. Another mentor shared his experience as a volunteer opening a new area,

For the senior mentors [of my Pathway group] when I was a Pathway student, Pathway was everything [to them]. For me, I have a job [and other responsibilities] . . . but even through those challenges, we’re trying to keep the program as best as [we] . . . can be running it. (Area 7 mentor)

The combination of being a volunteer, becoming a mentor, and establishing the Pathway program in a new area made the need for additional training particularly valuable to mentors. One Area 4 mentor explained,

The online training was good, and I think that it covered pretty much everything, but as we were starting the program here, there were a lot of things that we didn’t know about logistics and all the things that were not on the online training We [did] not know where to go [for help].

Mentors reported that they frequently learned to be a mentor through the process of mentoring.

Although some mentors disliked the repetitive nature of some of the training, one mentor explained how the same principles that had helped her as a nurse, applied to mentor training,

Whether or not I’m a volunteer, I need training You always need ongoing reminders. In my former career, I was a nurse, and we had training every year that went over the same things. Things we did not do often, we retrained on those every year. We had to be retrained on those things every year so that we’d remember how to do it if we did need to use it That would be on equipment . . . on processes, procedures And the [skills] that you [used] all the time, you don’t really need to be trained on because you know how to do it. So it’s the [skills] you don’t use all the time that you need the yearly updates on. (Area 2 mentor)

Even repetitive training added value to a volunteer mentor program if mentors understood the purpose of the training and how it could help them assist students. Mentors also felt ongoing training added accountability and goal-setting opportunities for their work with students.

Mentor volunteers were also self-sufficient. While many mentors in this study wanted more training, whether or not they received it, they acted

independently based on the knowledge they did have to provide the best educational experience for their students. One mentor described her experience: “We’re . . . the kind of people that if we needed help . . . [we’re] not afraid to ask for it We haven’t [had] a lot of hand holding but I don’t think we’ve really [needed] it” (Area 5 mentor). An Area 6 mentor explained that as mentors, “Every week we learn something different Sometimes I [wish] I knew a little bit more, but on the whole, I think the doing brings on more of the knowing.” Mentors were proactive in reading the training manual or seeking out the training website as an Area 2 mentor explained, “I’ve had lots of questions that have come up since [the initial training] that I just . . . went on the [website] and tried to look for.” If they did not receive training, they sought out the answers they needed. They expected training that supported their autonomy.

Mentoring Training Creativity

Mentoring in the Pathway organization helped establish effective mentoring practices. Pathway used a creative, informal training approach in its ongoing training in several groups through the social media app, WhatsApp (Version 2.19.51; WhatsApp, Inc., 2019). WhatsApp is a messaging application where the user sends messages, pictures, video, and other communication by internet communication instead of by telephone connection. It is used worldwide, but it is especially popular outside of the United States. A mentor in Area 3 described how WhatsApp worked for mentors, “It’s not formal training, [but] we can write questions and our [training] leaders can answer them.” Another mentor in Area 6 explained, “We can ask . . . [questions] on our WhatsApp . . . and someone always responds We can get an answer . . . usually within minutes.” An Area 3 mentor explained the WhatsApp training, “In this group we can exchange information among the [mentors] that [are] serving all around Brazil. We have [mentors] in many places. So it’s a way of giving some information . . . it’s not any specific training, but it’s to share the information.” An Area 6 mentor described this training as “the most helpful [training].” Mentors reported that most WhatsApp questions were shared at the beginning of the semester and became less frequent as the semester went on.

As previously discussed, one of the most important mentor training concerns was knowing how to find answers to their questions and student

questions, and having those questions answered. One mentor explained how mentors are able to have these questions answered through WhatsApp,

The group in WhatsApp is helpful for us because when we have some questions from the students, we can write these questions there. Then, the leaders can answer these questions For example, [someone writes], “I cannot get into my site. Can somebody send me the link, please?” Then, our manager in the area sends the link. The manager . . . tells us, “Are you talking about your Pathway location in [city in Mexico]? To look at who is enrolling, you need to [gives specific instructions].” [And he] sent another site [on] the web.” (Area 6 mentor)

Local Pathway representatives provided mentors with a creative way to find the answers they needed as they needed them through immediate training in the WhatsApp group. They could then share this information with students. Study results showed that ongoing training occurred for the majority of mentors in the Pathway program. Even with ongoing training occurring, most mentors wanted additional training.

Discussion

The central purpose of this study was to examine how ongoing training affects mentors’ abilities to assist higher education students in achieving their educational goals. The results of the study showed that the majority of mentors had received ongoing training, that mentors reported that the training received was beneficial to them in their mentor service, and that they desired additional training. This discussion explains the benefits and the challenges of Pathway’s ongoing training for its mentors in assisting students as supported by mentoring literature. From the results, three additional themes emerged, (a) ongoing training positively impacts mentors, (b) ongoing training identifies effective volunteer mentors, (c) ongoing training advances effective mentoring practices. The analysis of these themes is examined below.

Comparison and Interpretation of Findings

Throughout mentoring literature, training is cited as fundamental to mentoring success (Bland, 2003; Braun & Zolfagharian, 2016; Ehrich et al., 2004). The

results of this study are consistent with mentoring literature on the topics of ongoing training and mentor perspectives on training as they seek to assist students in learning.

Ongoing Training Positively Impacts Mentors

Ninety percent of mentors in this study requested additional training to supplement training they had already received at the time they were interviewed. These results showed details about how ongoing training occurred in a higher education mentoring program, which is unique in mentoring literature because there are few specifics about the ongoing training experience for mentors (Butz et al., 2018; Mondisa & McComb, 2018; Raposa et al., 2017). These results provided details of the ongoing mentor training in the Pathway higher education program.

In this study, ongoing training was important to mentors understanding their roles and responsibilities. Without adequate training, many mentors do not understand their role and how they can most effectively help students (Bear & Jones, 2017; Bowser et al., 2014; Kramer-Simpson, 2018). This study showed the value of clarifying mentor roles (Black & Taylor, 2018). In this study, it was important that mentors understood that one of their roles was to watch over and guide students, not to teach program content. The training helped them understand that the students were responsible for their individual learning and the mentor role was to support the students in that learning. This explanation of their supportive role alleviated concern for mentors that they needed more content knowledge of subject materials to mentor students. Ongoing training benefits from including role clarification as part of mentoring support.

Mentors also valued staying informed through ongoing training program updates. Research has emphasized the importance of sharing program information and goals with both mentors and students (Cox et al., 2014; Martin & Bok, 2015). For mentors in this study, ongoing training updates contributed current information they needed to feel successful in facilitating their classes. Although many mentors found the ongoing training for program updates less important than other training, they recognized that the updates were necessary information they needed to know. While weekly emails were sent to mentors with certain information, there had not been a reliable schedule for ongoing training program updates. The study showed a need for a predictable schedule for program updates, specifically at the beginning of program semesters.

Pathway’s ongoing training schedule differed from area to area across the world, but consistency in ongoing training provided security for mentors to know they could count on receiving new information or changes to share with students.

Formal and informal trainings were most helpful for mentors when they provided opportunities for mentors to ask questions and have their questions answered. Some mentoring areas had found efficient methods to answer mentor questions by asking for questions in advance of training sessions and by providing opportunities for the WhatsApp groups to answer questions almost instantly (Kutzik, 2005). For mentors in the study, whether or not the training was helpful or not was directly related to whether or not they were able to quickly and efficiently find answers to their questions and student questions. There were more mentor and student questions as the program began each semester and as new students entered the program. The results showed that ongoing training needed to occur on a regular schedule so that questions could be answered consistently. Ongoing training that resulted in questions being answered was one of the most beneficial types of training for mentors in this study.

Greater confidence for mentors was another benefit of ongoing training the study highlighted. Mentors who understood program expectations for them and their students could act confidently in their roles and responsibilities (Rees Lewis et al., 2018). In this study, in times of doubt or fear about skills, mentors have returned to the ongoing training they had received for encouragement in the mentoring process. Ongoing training also seemed to give mentors additional credibility with their students. An Area 4 mentor said, “[Training helps students] feel I can help them . . . They feel confidence in me.” Mentors felt more empowered to explain procedures and processes to their students with answers from the training to support them.

Identifying Contributing Mentor Volunteers

Ongoing mentoring training programs need to be aware of and support the unique needs of volunteer mentoring, including providing support for mentors so they understand how to most effectively interact with students and be cognizant of student needs (Brudney, 2016; Rees Lewis et al., 2015). All of the participants in this study were volunteers. This study identified important characteristics for volunteer mentors in higher education and qualities mentor programs can use to identify potential volunteers who can best support

students. Mentors needed to be service-oriented with a strong desire to encourage student success. As one mentor said of her desire to help and empower students, “I wanted to make sure that they felt . . . they could do this” (Area 5 mentor). Mentors needed to be self-sufficient, including self-motivated and self-reliant since minimal training is a concern for many mentoring programs (Ehrich et al., 2004). An Area 6 mentor described how she perceived the Pathway mentors in her area contributing their part to the mentoring program, “Everyone is putting forth the effort to make this program work well.”

Volunteer mentors also needed to be willing to learn. For some mentors, this meant they had been previous Pathway students and could share their program experience learning to help students. A mentor in Area 5 said, “Being in their shoes before [as a student], it really helps me to help them.” Other mentoring programs have also shown success in recruiting alumni volunteer mentors (Poor & Brown, 2013). For mentors who were not previous Pathway students, much of the training information was new. With 90% of mentors requesting additional training, this program has selected volunteers who want to actively learn more. The ongoing training provided in this study has shown the importance of balancing the need for information and social needs in volunteer learning opportunities (Edwards, 2012).

Ongoing Training Advances Effective Mentoring Practices

Research has provided little information about the details of successful ongoing mentoring training, so identifying effective ideas in this area is an evolving process. Several Pathway areas, taking their own initiative, have instigated and developed mentoring training through WhatsApp social media groups for informal ongoing training opportunities. In addition to training on how to use the Pathway program, WhatsApp was also used for just-in-time training for student needs as they occurred to provide solutions for common problems. An Area 6 mentor explained how this training takes place,

Sometimes when . . . students [have questions] in that moment, and the student is asking us about something, we don’t know the [answer]. We ask quickly in the WhatsApp group . . . The questions appear in any moment from the students, especially when the enrollment is open or when the program is in the beginning.

The creation of the WhatsApp group reflected what is described in other learning scenarios as “just-in-time” training. In a corporate setting the difference between ongoing training and just-in-time training was described by Kutzik (2005). Ongoing training was basic skills training for new team members or for team members who have new responsibilities. Ongoing training is usually “delivered one-on-one (trainer to employee) or taught in small classes scheduled frequently through the year” (Kutzik, 2005, p. 8). Just-in-time training is for needs that develop quickly and for answers that are needed in a short time period. Kutzik (2005) explained, “The function of just-in-time training is to rapidly provide instruction for emerging . . . needs” (p.10). Another example is a 2012 McCarthy study that showed Facebook as an effective platform for mentoring and a positive learning environment from the student perspective.

For Pathway mentors who had immediate training needs that required quick answers, the WhatsApp group fulfilled that need for instruction that could not be fulfilled in the traditional ongoing training setting. The mentors’ willingness to seek out new ways to learn and participate in their mentoring practices created training that one Area 6 mentor described as “so effective.” As an Area 3 mentor explained, “[The WhatsApp group is] good because . . . like the Pathway students, [we] are teaching and learning with each other.” This ongoing training development met an important training need for Pathway mentor groups and, based on their feedback, became an effective practice.

Contributions of Findings to the Literature

The findings on ongoing training strengthen existing research on the importance of mentor training (Butz et al., 2018; Castellanos et al., 2016; Ehrich et al., 2004; Poor & Brown, 2013; Renn et al., 2014; Smith-Ruig, 2014). There are very few specifics in the literature about what type of content is most beneficial for mentoring training. This study adds to the literature about specific training resources that are beneficial to mentors, including reference resources, training contacts, group training, social media sites for questions, and regular training updates. The findings on volunteer mentoring add to the literature on volunteer mentoring characteristics and their ongoing training needs (Brudney, 2016; Edwards, 2012; Hood, 2012). There is little available research on creativity in mentoring training and best practices. This study shows how an educational program identified effective training methods

for mentors to better connect to each other to improve training knowledge and to meet mentor needs to benefit students.

Mentors Contribute to Best Training Practices

For the mentors in this study, some of the most effective training came as they answered each other's questions in the WhatsApp group. Similarly, mentors appreciated the opportunity to share ideas in group Zoom training with other mentors. Those who did not have group training opportunities to share with other mentors wanted more of those training opportunities. Mentors themselves may be a program's best resource for ongoing training instruction as more experienced mentors share lessons learned with newer mentors, and mentors discuss in a group how they solved a specific mentoring problem or what mentoring ideas worked for them to best help students. For volunteer mentoring programs such as the program in this study, these mentor-to-mentor training sessions require organization, but could also minimize training costs from additional staff, which is often a concern for mentoring programs (Martin & Bok, 2015).

Volunteer Mentors May Need More Training

The Pathway mentors in this study were all volunteers, as are all Pathway mentors worldwide. Volunteer mentors may need more training because they are volunteers and need organization support. Depending on their global location, some Pathway mentors reported an absence of structured training opportunities to help them establish and run their classes. Some reported feeling challenged by significant personal responsibilities in their locations as they tried to organize the Pathway program and mentor students. Others reported not knowing where to go for help when they needed it. Twenty percent of volunteers in the study reported not receiving ongoing training, so more could be done to reach out to all volunteers. Mentoring organizations with volunteers need to understand the needs of their volunteers and show them they are valued and important to the success of the organization (Hood, 2012). This finding shows the importance that regular training evaluations can provide with feedback to the organization of how they are doing at meeting volunteer training needs and providing needed support (Black & Taylor, 2018).

The Transferability of Mentoring Training across the World

This study was conducted in 13 of the 134 countries Pathway served in in 2019. Mentors did not feel that their international location significantly affected the organization’s ongoing training process, compared to the benefits of ongoing training and being supported as a volunteer. This finding suggests that a mentoring ongoing training program potentially could be successful across cultures and countries. This finding can also provide support to educational institutions with diverse populations of students and mentors that even with financial constraints, an effective mentoring program can be advocated and implemented (Coles, 2011; Martin & Bok, 2015).

Implications for Future Research

While this study provided beneficial insights into improving ongoing training for higher education mentors, more research is needed to continue to improve mentors’ ability to help students. This was a small qualitative study of 20 mentors in a specific higher education program. The most significant improvement to this study would be a larger qualitative or mixed methods study of more mentors in multiple higher education programs who could provide a greater source of data for analysis regarding their ongoing training experience. The mentors studied in this research were serving in international locations outside the United States, which may have affected their perspective of mentoring. Additional studies could examine mentors in other areas. To broaden the scope of this study, all mentors were interviewed through Zoom. Conducting in-person interviews would eliminate connection problems and could provide additional insights into mentoring. Interviewing mentors in their native language could produce greater clarity and depth of response by mentors.

This study did not collect student data to compare with the mentor data collected. Student data could be collected as part of the study to compare student perceptions of mentoring with mentor perceptions and how ongoing training affects those views. Also, the mentors in this study were volunteers. Research should be done to compare volunteer mentors to paid mentors and how ongoing training affects their ability to help students meet their educational goals. The mentors in this study had served as mentors for less than three years. Additional studies could focus on lessons learned from long-

term mentoring and how higher educational programs can better retain mentors. As mentoring needs continue to increase for higher education students (Allen & Lester, 2012; Gravel, 2012; Letkiewicz et al., 2014; Poor & Brown, 2013; Villaseñor et al., 2013), more research like this study is needed.

Implications for Practitioners

This study provides specific recommendations for higher education mentoring programs as they develop ongoing training practices. COVID-19 challenges to higher education have shown the need for more focus on mentoring (Cahapay, 2020; Thompson & Lodge, 2020). Mentoring literature suggests ongoing training but is very vague about specific ongoing training that will be most helpful to higher education mentors (Butz et al., 2018; Castellanos et al., 2016; Dahlvig, 2010; Henry et al., 2011; Lunsford, 2011; Martin & Bok, 2015; Mondisa & McComb, 2018). This study provides more specific guidelines for ongoing training for mentors, including regularly scheduled training meetings and types of ongoing training for consideration. It also provides information about what content is most helpful to mentors in ongoing training—understanding their role and responsibilities as mentors, informing mentors about program updates and changes, providing answers to mentor and student questions, and strengthening mentor confidence.

For volunteer mentors, this study provides additional insight into better understanding volunteer needs in ongoing training. This study also showed important characteristics of volunteer mentors that can be used in recruiting mentors who will best meet student needs. We recommend identifying opportunities for developing creative and improved best practices in mentoring as Pathway did with its mentor-to-mentor training sessions and just-in-time WhatsApp training.

Conclusion

Ongoing training has the potential to have a significant impact on mentors and the students they guide through the educational process. While ongoing mentoring training has been recommended in previous literature, it has not been explained in sufficient detail to provide meaningful assistance for mentoring programs who want to use ongoing training to improve

mentor/student interaction. Ongoing training provides direction, support and validation for mentors, a continuing connection to the mentoring organization, and assistance with student needs.

This research study provided a literature review of the background of mentoring and ongoing training, the value of ongoing mentoring training, and the challenges of ongoing training. This qualitative study analyzed interview responses from 20 mentors in international locations in a global higher educational initiative. The study results showed the benefits from ongoing mentoring training, including mentors better understanding their roles and responsibilities, mentors gaining knowledge, and mentors receiving ongoing support. Results also showed volunteer mentoring needs and mentoring training creativity. Furthermore, the study showed that ongoing training positively impacts mentors, that it identifies contributing mentor volunteers, and that ongoing training advances effective mentoring practices. The study also contributed findings to the literature including that mentors themselves contribute to best training practices, volunteer mentors may need more mentoring training, and ongoing mentoring training has global transferability.

More research is needed on the student perspective of mentoring ongoing training and how ongoing training affects the student/mentor interaction. More Pathway mentors in this study provided an example of mentoring that could possibly be replicated in other mentoring programs. More can be done throughout higher education to channel the possibilities of mentoring to make a difference in the lives of students and to help them achieve their educational and career goals. The COVID-19 pandemic has shown that transformative mentoring must be part of elevating students in challenging times. As institutions of higher education take greater initiative in providing structured ongoing training for mentors, mentors will be more knowledgeable and confident in their mentoring skills and students will have increased opportunity for success research is also needed on the comparison of mentor types, including paid mentors compared to volunteer mentors and peer mentors. Ongoing training and mentor retention should also be studied in greater depth and continued research is needed into how well training can move across cultures. Research shows that undergraduate mentoring is a significant factor in student achievement possibilities (Baier, Markman, & Pernice-Duca, 2016). In addition to ongoing training for mentors, this study of Pathway mentors has shown the value and importance of prioritizing mentors in higher education learning environments because they can provide critical support for students that compensates in the absence of an in-person instructor (Velasquez, Graham, & West, 2013). Pathway mentors in this study

provided an example of mentoring that could possibly be replicated in other mentoring programs. More can be done throughout higher education to channel the possibilities of mentoring to make a difference in the lives of students and to help them achieve their educational and career goals. As institutions of higher education take greater initiative in providing structured ongoing training for mentors, mentors will be more knowledgeable and confident in their mentoring skills and students will have increased opportunity for success.

References

- Allen, I. H., & Lester, S. M., Jr. (2012). The impact of a college survival skills course and a success coach on retention and academic performance. *Journal of Career and Technical Education*, 27(1), 8–14. <http://doi.org/10.21061/jcte.v27i1.536>.
- Anderson, W., Motto, J. S., & Bourdeaux, R. (2014). Getting what they want: Aligning student expectations of advising with perceived advisor behaviors. *Mid-Western Educational Researcher*, 26(1), 27–51. <https://www.mwera.org/MWER/volumes/v26/issue1/v26n1-Anderson-Motto-Bourdeaux-FEATURE-ARTICLES.pdf>.
- Baier, S. T., Markman, B. S., & Pernice-Duca, F. M. (2016). Intent to persist in college freshmen: The role of self-efficacy and mentorship. *Journal of College Student Development*, 57(5), 614–619. <http://doi.org/10.1353/csd.2016.0056>.
- Bear, S., & Jones, G. (2017). Students as protégés: Factors that lead to success. *Journal of Management Education*, 41(1), 146–168. <http://doi.org/10.1177/1052562916658688>.
- Behar-Horenstein, L. S., Roberts, K. W., & Dix, A. C. (2010). Mentoring undergraduate researchers: An exploratory study of students' and professors' perceptions. *Mentoring & Tutoring*, 18(3), 269–291. <http://doi.org/10.1080/13611267.2010.492945>.
- Bettinger, E. P., & Baker, R. B. (2014). The effects of student coaching: An evaluation of a randomized experiment in student advising. *Educational Evaluation and Policy Analysis*, 36(1), 3–19. <http://doi.org/10.3102/0162373713500523>.
- Black, V. G., & Taylor, Z. W. (2018). Nobody's talking to the mentees. *Mentoring & Tutoring*, 26(5), 606–626. <http://doi.org/10.1080/13611267.2018.1561027>.
- Bland, S. M. (2003). Advising adults: Telling or coaching? *Adult Learning*, 14(2), 6–9. <http://doi.org/10.1177/104515950401400202>.
- Bowser, A., Hux, A., McBride, J., Nichols, C., & Nichols, J. (2014). The roles of site-based mentors in educational leadership programs. *College Student Journal*, 48(3), 468–472.
- Braun, J., & Zolfagharian, M. (2016). Student participation in academic advising: Propensity, behavior, attribution and satisfaction. *Research in Higher Education*, 57(8), 968–989. <http://doi.org/10.1007/s11162-016-9414-2>.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In C. Willig & W. S. Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (pp. 843–860). Thousand Oaks, CA: Sage Publications.

- Brudney, J. L. (2016). Designing and managing volunteer programs. In D.O. Renz & R.D. Herman (Eds.), *The Jossey-Bass handbook of nonprofit leadership and management* (pp. 688–733). Hoboken, NJ: John Wiley & Sons. doi: 10.1002/9781119176558.ch24.
- Butz, A. R., Spencer, K., Thayer-Hart, N., Cabrera, I. E., & Byars-Winston, A. (2018). Mentors’ motivation to address race/ethnicity in research mentoring relationships. *Journal of Diversity in Higher Education*, 12(3), 242–254. <http://doi.org/10.1037/dhe0000096>.
- BYU-Pathway Worldwide. (2019, April 1). <https://www.byupathway.org>.
- BYU-Pathway Worldwide. (2021, October 1). Facts and Stats, <https://www.byupathway.org/facts-stats>.
- Cahapay, M. (2020). A reconceptualization of learning space as schools reopen amid and after COVID-19 pandemic. *Asian Journal of Distance Education*, 15(1), 269–276. <https://doi.org/10.5281/zenodo.3892969>.
- Castellanos, J., Gloria, A. M., Besson, D., & Harvey, L. O. C. (2016). Mentoring matters: Racial ethnic minority undergraduates’ cultural fit, mentorship, and college and life satisfaction. *Journal of College Reading and Learning*, 46(2), 81–98. <http://doi.org/10.1080/10790195.2015.1121792>.
- Coles, A. (2011). The role of mentoring in college access and success. *Research to practice brief*. Washington, D.C.: Institute for Higher Education Policy. <https://files.eric.ed.gov/fulltext/ED520415.pdf>.
- Considerations for Institutions of Higher Education. (2020). <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-ihe-response.html>.
- Cox, C. B., Yang, Y., & Dicke-Bohmann, A. K. (2014). What do Hispanic students want in a mentor? A model of protégé cultural orientation, mentorship expectations, and performance. *Journal of Hispanic Higher Education*, 13(4), 359–376. <http://doi.org/10.1177/1538192714546747>.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Dahlvig, J. (2010). Mentoring of African American students at a predominantly white institution (PWI). *Christian Higher Education*, 9(5), 369–395. <http://doi.org/10.1080/15363750903404266>.
- Dawson, P. (2014). Beyond a definition: Toward a framework for designing and specifying mentoring models. *Educational Researcher*, 43(3), 137–145. <http://doi.org/10.3102/0013189X14528751>.
- de Metz, N., & Bezuidenhout, A. (2018). An importance–competence analysis of the roles and competencies of e-tutors at an open distance learning institution. *Australasian Journal of Educational Technology*, 34(5). <https://doi.org/10.14742/ajet.3364>.
- DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30(2), 157–197. <http://doi.org/10.1023/A:1014628810714>.
- Edwards, H. C. (2012). Orientation: Welcoming new volunteers into the organization. T. D. Connors (Ed.), *The volunteer management handbook: Leadership strategies for success* (2nd ed.; pp. 227–235). Hoboken, NJ: John Wiley & Sons. <http://doi.org/10.1002/9781118386194.ch9>.

- Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, 40(4), 518–540. <http://doi.org/10.1177/0013161X04267118>.
- Ensher, E. A., Heun, C., & Blanchard, A. (2003). Online mentoring and computer-mediated communication: New directions in research. *Journal of Vocational Behavior*, 63(2), 264–288. [http://doi.org/10.1016/S0001-8791\(03\)00044-7](http://doi.org/10.1016/S0001-8791(03)00044-7).
- Gaffney, N. A. (Ed.) (1995). *A Conversation about mentoring: Trends and models*. Washington D.C.: Council of Graduate Schools. <https://files.eric.ed.gov/fulltext/ED397762.pdf>.
- Gershenfeld, S. (2014). A review of undergraduate mentoring programs. *Review of Educational Research*, 84(3), 365–391. <https://doi.org/10.3102/0034654313520512>.
- Gravel, C. A. (2012). Student-advisor interaction in undergraduate online degree programs: A factor in student retention. *NACADA Journal*, 32(2), 56–67. <https://www.learntechlib.org/p/91779/>.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage Publications.
- Hager, M. A., & Brudney, J. L. (2008). Management capacity and retention of volunteers. In LiaoTroth, M. (Ed.), *Challenges in volunteer management* (pp. 9–27). Charlotte, NC: Information Age Publishing.
- Henry, J., Bruland, H. H., & Sano-Franchini, J. (2011). Course-embedded mentoring for first-year students: Melding academic subject support with role modeling, psychosocial support, and goal setting. *International Journal for the Scholarship of Teaching and Learning*, 5(2), 242–264. <https://doi.org/10.20429/ijstl.2011.050216>.
- Homitz, D. J., & Berge, Z. L. (2008). Using e-mentoring to sustain distance training and education. *The Learning Organization*, 15(4), 326–335. <https://doi.org/10.1108/09696470810879574>.
- Hood, M. K. (2012). Training volunteers. T. D. Connors, (Ed.), *The volunteer management handbook: Leadership strategies for success* (2nd ed.; pp. 237–254). Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/9781118386194.ch10>.
- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61(4), 505–532. <https://doi.org/10.3102/00346543061004505>.
- Karcher, M. J. (2008). The cross-age mentoring program: A developmental intervention for promoting students' connectedness across grade levels. *Professional School Counseling*, 12(2), 137–143. <https://doi.org/10.1177/2156759X0801200208>.
- Kramer-Simpson, E. (2018). Moving from student to professional: Industry mentors and academic internship coordinators supporting intern learning in the workplace. *Journal of Technical Writing and Communication*, 48(1), 81–103. <https://doi.org/10.1177/0047281616646753>.
- Kutzik, J. S. (2005). Just-in-time technology training for emergent needs. *Library Mosaics*, 16(4), 8–10. <https://doi.org/10.20429/ijstl.2011.050216>.
- Letkiewicz, J., Lim, H., Heckman, S., Bartholomae, S., Fox, J. J., & Montalto, C. P. (2014). The path to graduation: Factors predicting on-time graduation rates. *Journal of College Student Retention*, 16(3), 351–371. <https://doi.org/10.2190/CS.16.3.c>.

- Lev, E. L., Kolassa, J., & Bakken, L. L. (2010). Faculty mentors' and students' perceptions of students' research self-efficacy. *Nurse Education Today*, 30(2), 169–174. <https://doi.org/10.1016/j.nedt.2009.07.007>.
- Lunsford, L. G. (2011). Psychology of mentoring: The case of talented college students. *Journal of Advanced Academics*, 22(3), 474–498. <https://doi.org/10.1177/1932202X1102200305>.
- Martin, D., & Bok, S. (2015). Social dominance orientation and mentorship: Mitigating hierarchical preference through work roles or just low expectations? *Personnel Review*, 44(4), 592–610. <https://doi.org/10.1108/PR-08-2013-0141>.
- McCarthy, J. (2012). International design collaboration and mentoring for tertiary students through Facebook. *Australasian Journal of Educational Technology*, 28(5). <https://doi.org/10.14742/ajet.1383>.
- Miller, A. (2007). Best practices for formal youth mentoring. T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 307–324). Malden, MA: Blackwell Publishing. <https://doi.org/10.1111/b.9781405133739.2007.00019>.
- Mondisa, J. L., & McComb, S. A. (2018). The role of social community and individual differences in minority mentoring programs. *Mentoring & Tutoring*, 26(1), 91–113. <https://doi.org/10.1080/13611267.2018.1445432>.
- Nesbit, R. (2013). The influence of family and household members on individual volunteer choices. *Nonprofit and Voluntary Sector Quarterly*, 42(6), 1134–1154. <https://doi.org/10.1177/0899764012450365>.
- Nora, A., & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention*, 9(3), 337–356. <https://doi.org/10.2190/CS.9.3.e>.
- Osterling, K. L., & Hines, A. M. (2006). Mentoring adolescent foster youth: Promoting resilience during developmental transitions. *Child and Family Social Work*, 11(3), 242–253. <https://doi.org/10.1111/j.1365-2206.2006.00427.x>.
- Poor, C. J., & Brown, S. (2013). Increasing retention of women in engineering at WSU: A model for a women's mentoring program. *College Student Journal*, 47(3), 421–428. <https://eric.ed.gov/?id=EJ1022628>.
- Putsche, L., Storrs, D., Lewis, A. A., & Haylett, J. (2008). The development of a mentoring program for university undergraduate women. *Cambridge Journal of Education*, 38(4), 513–528. <https://doi.org/10.1080/03057640802482322>.
- Rabionet, S. E. (2011). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *Qualitative Report*, 16(2), 563–566.
- Ragins, B. R., & Kram, K. E. (2007). *The handbook of mentoring at work: Theory, research, and practice*. Thousand Oaks, CA: Sage Publications.
- Raposa, E. B., Dietz, N., & Rhodes, J. E. (2017). Trends in volunteer mentoring in the United States: Analysis of a decade of census survey data. *American Journal of Community Psychology*, 59(1–2), 3–14. <https://doi.org/10.1002/ajcp.12117>.
- Rees Lewis, D. G., Easterday, M. W., Harburg, E., Gerber, E. M., & Riesbeck, C. K. (2018). Overcoming barriers between volunteer professionals advising project-based learning teams with regulation tools: Overcoming advising barriers with regulation tools.

- British Journal of Educational Technology*, 49(3), 354–369. <https://doi.org/10.1111/bjet.12550>.
- Rees Lewis, D., Harburg, E., Gerber, E. M., & Easterday, M. (2015). Building support tools to connect novice designers with professional coaches. In *Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition* (pp. 43–52). Glasgow, UK: ACM Press. <https://doi.org/10.1145/2757226.2757248>.
- Renn, R. W., Steinbauer, R., Taylor, R., & Detwiler, D. (2014). School-to-work transition: Mentor career support and student career planning, job search intentions, and self-defeating job search behavior. *Journal of Vocational Behavior*, 85(3), 422–432. <https://doi.org/10.1016/j.jvb.2014.09.004>.
- Rhodes, J., Liang, B., & Spencer, R. (2009). First do no harm: Ethical principles for youth mentoring relationships. *Professional Psychology, Research, and Practice*, 40(5), 452–458. <https://doi.org/10.1037/a0015073>.
- Sanyal, C., & Rigby, C. (2017). E-mentoring as a HRD intervention: An exploratory action research study within an international professional mentoring scheme. *Human Resource Development International*, 20(1), 18 <https://doi.org/10.1080/13678868.2016.1220156>.
- Shrestha, C. H., May, S., Edirisingha, P., Burke, L., & Linsey, T. (2009). From face-to-face to e-mentoring: Does the “e” add any value for mentors? *International Journal on Teaching and Learning in Higher Education*, 20(2), 116–124. https://www.researchgate.net/publication/38178215_From_face-to-face_to_e-mentoring_Does_the_e_add_any_value_for_mentors.
- Smith-Ruig, T. (2014). Exploring the links between mentoring and work-integrated learning. *Higher Education Research & Development*, 33(4), 769–782. <https://doi.org/10.1080/07294360.2013.863837>.
- Spradley, J. P. (1979). *The ethnographic interview*. Fort Worth, TX: Holt, Reinhardt and Winston.
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York, NY: Guilford Press.
- Thompson, K., & Lodge, J. (2020). 2020 vision: What happens next in education technology research in Australia. *Australasian Journal of Educational Technology*, 36(4), 1-8. <https://doi.org/10.14742/ajet.6593>.
- Velasquez, A., Graham, C. R., West, R. E. (2013). An investigation of practices and tools that enabled technology-mediated caring in an online high school. *The International Review of Research in Open and Distributed Learning*, 14(5), 277-299. Doi: 10.19173.irrodl.v14i5.1465.
- Villaseñor, M. J., Reyes, M. E., & Muñoz, I. (2013). Mujerista, mentoring for Chicanas/Latinas in higher education. *Journal of College Student Retention*, 15(1), 49–64. <https://doi.org/10.2190/CS.15.1.d>.
- WhatsApp, Inc. (2019). WhatsApp (2.19.51) Retrieved from <https://whatsapp.com>.
- Williams, S., Sunderman, J., & Kim, J. (2012). E-mentoring in an online course: Benefits and challenges to e-mentors. *International Journal of Evidence Based Coaching and Mentoring*, 10(1), 109–123. <https://radar.brookes.ac.uk/radar/file/5a23e628-e881-48df-8eb3-7d0397934c0e/1/vol10issue1-paper-08.pdf>.

- Yin, R. K. (2017). *Case study research and applications: Design and methods*. Thousand Oaks, CA: Sage Publications.
- Zelditch, M. (1990, March). Mentor roles. In *Proceedings of the 32nd annual meeting of the Western Association of Graduate Schools*, 11.
- Zoom Video Communications, Inc. (2019). Zoom (3.6.5) Retrieved from <https://zoom.us>.

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Publications from the Last 3 Years:

Andersen, C. L. & West, R. E. (2021). “We overwhelm them with hope”: How online mentors can support online learners. *Online Learning Journal*, 25(4), 388-415. Available at <https://olj.onlinelearningconsortium.org/index.php/olj/article/view/2440>.

Andersen, C. L. & West, R. E. (2020). Improving mentoring in higher education in the age of online learning. *Revista de Educación a Distancia* (Distance Education Journal), 20(64). <https://doi.org/10.6018/red.408671>. Available at <https://revistas.um.es/red/article/view/408671/287331>.

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Publications from the Last 3 Years:

Textbook

McDonald, J. K. & West, R. E. (2020). Design for Learning: Principles, Processes, and Praxis. Available at <https://edtechbooks.org/id>.

Articles

Lowenthal, P., Best, E., West, R. E., Borup, J., Archambault, L. (2021). Faculty perceptions of using synchronous video-based communication technology. *Online Learning Journal*, 25(4), 74-103. Available at

<https://olj.onlinelearningconsortium.org/index.php/olj/article/view/2890>. (T2).

Andersen, C. L. & West, R. E. (2021). “We overwhelm them with hope”: How online mentors can support online learners. *Online Learning Journal*, 25(4), 388-415. Available at <https://olj.onlinelearningconsortium.org/index.php/olj/article/view/2440>. (T2).

Andersen, C. L. & West, R. E. (2020). Improving mentoring in higher education in the age of online learning. *Revista de Educación a Distancia* (Distance Education Journal), 20(64). <https://doi.org/10.6018/red.408671>. Available at <https://revistas.um.es/red/article/view/408671/287331>.

Cardenas, C., West, R. E., Swan, R. & Plummer, K. (2020). Modeling expertise through decision-based learning: Theory, practice, and technology applications. *Revista de Educación a Distancia* (Distance Education Journal), 20(64). <https://doi.org/10.6018/red.408651>. Available at <https://revistas.um.es/red/article/view/408651>.

Published in Spanish, at <https://revistas.um.es/red/article/view/449831>.

West, R. E., Tawfik, A. A., Gishbaugher, J. J., & Gatewood, J. (2020). Guardrails to constructing learning: The potential of open microcredentials to support inquiry-based learning. *TechTrends*, 64, 828-838. <https://doi.org/10.1007/s11528-020-00531-2> (T2).

Randall, D. & West, R. E. (2020). Who cares about open badges? An examination of principals’ perceptions of the usefulness of teacher open badges in the United States. *Open Learning: The Journal of Open, Distance, and e-Learning*. 1-19 <http://dx.doi.org/10.1080/02680513.2020.1752166> (T2).

Lowenthal, P., Borup, J., West, R. E., & Archambault, L. (2020). Thinking beyond zoom: Using asynchronous video to maintain connection and engagement during the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28(2), 383-391. Available at <https://www.learntechlib.org/primary/p/216192/>. (T2).

Swan, R., Plummer, K., & West, R. E. (2020). Toward functional expertise through formal education: Identifying an opportunity for higher education. *Educational Technology Research and Development*, 68, 2551-2568. <https://doi.org/10.1007/s11423-020-09778-1>. Available at: <https://rdcu.be/b31Ci>. (T1).

Borup, J., Graham, C.R., West, R. E., Archambault, L., & Spring, K. (2020). Academic Communities of Engagement: An expansive lens for examining

support structures in blended and online learning. *Educational Technology Research and Development*, 68, 807-832. <https://doi.org/10.1007/s11423-020-09744-x>. Available at rdcu.be/b1K1z. (T1).

Translated into Spanish

- Kimmons, R., Graham, C., & West, R. (2020). The PICRAT model for technology integration in teacher preparation. *Contemporary Issues in Technology and Teacher Education*, 20(1). Available at <http://www.learntechlib.org/p/210228/>. (T2).
- Clements, K., West, R. E., & Jackson, S. (2020). Open badges for employee skill tracking. *International Journal of Designs for Learning*. <https://scholarworks.iu.edu/journals/index.php/ijdl/article/view/25850> (T3).
- Clements, K., West, R. E., & Hunsaker, E. (2020). Getting started with open badges. *International Review of Research in Open and Distributed Learning*, 21(1), 153-171. doi:10.19173/irrodl.v21i1.4529. Available at <http://www.irrodl.org/index.php/irrodl/article/view/4529>. (T1).
- Zhang, J. & West, R. E. (2020). Designing microlearning instruction for professional development through a competency-based approach. *TechTrends*. doi:10.1007/s11528-019-00449-4. Available at <https://rdcu.be/bYNqe>. (T2).
- Warr, M. & West, R. E. (2020). Bridging academic disciplines with interdisciplinary project-based learning: Challenges and opportunities. *Interdisciplinary Journal of Problem-based Learning*, 14(1). <https://doi.org/10.14434/ijpbl.v14i1.28590>. Available at <https://scholarworks.iu.edu/journals/index.php/ijpbl/article/view/28590>. (T2).
- Hunsaker, E. & West, R. E. (2020). Designing computational thinking and coding badges for early childhood educators. *TechTrends*, 64, 7-16. Available at <https://rdcu.be/bOtax>. <https://doi.org/10.1007/s11528-019-00420-3>. (T2).
- Randall, D., West, R. E., & Farmer, T. (2019). Effectiveness of undergraduate instructional design assistants in scaling a teacher education open badge system. *Contemporary Issues in Technology and Teacher Education*, 19(4). Available at <https://www.citejournal.org/volume-19/issue-4-19/general/effectiveness-of-undergraduate->

instructional-design-assistants-in-scaling-a-teacher-education-open-badges-system. (T2).

- Young, D., West, R. E., & Nylin, T. A. (2019). Value of open badge microcredentials to employees, customers, and the organization: A case study. *International Review of Research in Open and Distributed Learning*, 20(5). Available at <http://www.irrodl.org/index.php/irrodl/article/view/4345>. doi: <https://doi.org/10.19173/irrodl.v20i5.4345>. (T1).
- Arnesen, K., Hveem, J., Short, C., West, R. E., & Barbour, M. K. (2019). K-12 online learning journal articles: Scholarship trends from two decades. *Distance Education*, 40, 32-53. (T1) <https://doi.org/10.1080/01587919.2018.1553566>.
- Wikle, J. & West, R. E. (2019). An analysis of discussion forum participation and student learning outcomes. *International Journal on e-Learning*, 18, 205-228 (T2). Available at <https://www.learntechlib.org/primary/p/181356/>.
- Farmer, T. & West, R. E. (2019). Concerns of K-12 online teachers in the virtual trenches. *Journal of Online Learning Research*, 5, 97-118. Available at <https://www.learntechlib.org/primary/p/184482/> (T2).
- Bodily, B., Leary, H., & West, R. E. (2019). Research trends in instructional design and technology journals. *British Journal of Educational Technology*, 50, 64-79 (T1). doi: 10.1111/bjet.12712. Available at <https://onlinelibrary.wiley.com/doi/pdf/10.1111/bjet.12712>.
- McDonald, J. K., West, R. E., Rich, P. J., & Pfleger, I. (2019). “It’s so wonderful having different majors working together”: The development of the design thinking minor. *TechTrends*. (T2). doi:10.1007/s11528-018-0325-2. Available at <https://rdcu.be/5xGE>.
- West, R. E. (2019). Developing an Open Textbook for Learning and Instructional Design Technology. *TechTrends*, 63, 226-235. doi:10.1007/s11528-018-0263-z. Available at <http://rdcu.be/IGou>. (T2).