14 Humanizing the Academic Advising Experience with Technology

An Integrative Review

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Abstract

The use of information and communication technologies, such as Zoom, Canvas, Blackboard, and Microsoft Teams, have dramatically revolutionized student learning and academic advising at the time of the COVID-19 global pandemic. This chapter builds on previous research to explore how humanizing academic advising with technology impacts student interaction, technological engagement, and the online community in a higher education context. We examine how current and future technological advancement can be leveraged to reach and support students and argue that the academic advising process needs to put human beings at the center of the student experience. This integrative review provides a snapshot into the higher education landscape that may garner future conceptualization of advising practices, implementations, and policies.

Keywords:

academic advising, COVID-19, humanizing, information and communication technologies

Introduction

In March 2020, the COVID-19 global pandemic brought in-person learning and class instruction to a stop, and many universities had to resort to emergency e-learning protocols by moving courses and academic support services to the virtual environment (Murphy, 2020, p. 492). Almost 91% of students worldwide shifted to online education last year (Abumalloh et al., 2021) as institutions scrambled to enhance their technological infrastructure to continue supporting students and limit disruptions to their academic trajectories (Fried & McDaniel, 2020). As such, the role of academic advisors has been expanded to "first responders" to help alleviate students' stress, anxiety, and urgent situations in the post-era of COVID-19 pandemic

(Flaherty, 2020, p. 6). Now, more than ever, academic advisors are expected to be equipped with equanimity and quality while balancing their added responsibilities.

The historical and philosophical foundation of academic advising involves shaping students' worldview in a post-secondary educational environment (Frost, 2000). As faculty members find themselves more responsibilities in teaching, research, and service, the role of advising emerged as a key feature of the college experience (Hayes, 1841). More recently, Larson et al. (2018) revealed that academic advising cannot simply be defined as a term but rather as a verb "to empower students and campus and community members to successfully navigate academic interactions related to higher education" (p. 86). At its best, academic advising is "a supportive and interactive relationship between students and advisors" (Nutt, 2000, p. 220). It guides students in curriculum review (e.g., degree audit), provides general support to students' academic or personal matters, and refers them to university resources for further consultation.

Prior to the COVID-19 health crisis, there was ongoing technological advancement that supported student learning (Chang & Gomes, 2017; Gray et al., 2010; Leask, 2004). Namely, information and communication technologies (ICTs) have been found to be beneficial in enhancing the quality of learning. Leask (2004) posits that "ICTs can be used effectively to assist students in developing international perspectives, interacting with people from other cultures, and engaging actively in intercultural learning" (p. 350). However, it may be a challenging process for students to adapt to a new digital environment on campus (Gray et al., 2010). The ICT experience for international students, for instance, may be unique in the sense that the sources of online information they relied on while in their home country may be very different from what they have to grapple with on their new campus (Chang & Gomes, 2017). Language barriers and cultural differences may also impact how some students adapt to their online learning environment (Beckstein, 2020; Liu et al., 2010; Peters et al., 2020) and, by analogy, to the academic advising and support services that are offered in a virtual setting. It is therefore vital that online solutions are offered in alignment with adequate and intentional, technical, and administrative support so that students can fully benefit from the learning process (Leask, 2004).

The increase in technological integration in US higher education has inevitably changed in the practices, implementation, and organization of student support services (Amador & Amador, 2014; McDonald, 2008; Schwebel et al., 2012). While these advancements have traditionally been focused on tracking students' academic progress (Gutiérrez et al., 2020; Loucif et al., 2020; Pasquini & Eaton, 2019), in-person advising has been found to be generally more effective than online-advising (Kalamkarian & Karp, 2017; Pasquini & Steele, 2016; Steele, 2016). With the knowledge that students who have commonly needed the most help have been those who have not sought assistance (Museus & Ravello, 2010), this chapter builds on previous research to further investigate and analyze whether academic advising through current and future

technological integration can be leveraged to reach and help these students (Feghali et al., 2011; Glass et al., 2021; LaPadula, 2003). It particularly explores, through an integrative literature review, how humanizing academic advising with technology impacts student interaction, technological engagement, and online community, and makes an overarching claim that academic advising needs to focus on putting human beings in the center of the student experience (i.e., technology-to-human-to-human-to-technology), and not solely focus on technological advancement (Castañeda & Selwyn, 2018; Selwyn, 2016).

Method

Through synthesis and critical evaluation, we reviewed, critiqued, and synthesized existing literature and research from 2005 to 2020 on the topic of academic advising and the use of technology within the higher education context. This process is also referred to as meta-synthesis, which typically includes highly structured search strategies with inclusion and exclusion criteria such as data type, data range, and topic focus (Catalano, 2013). Integrative and systematic reviews, from both quantitative and qualitative research, have been widely used in the field of higher education to evaluate and synthesize literature, methodologies, and relevant findings (Bearman et al., 2012; Iatrellis et al., 2017; Storrie et al., 2010).

Inclusion and Exclusion Criteria

The process of establishing inclusion and exclusion criteria for selecting studies to use in research is a standard practice that helps determine the scope and validity of systematic review results (Meline, 2006). It sets the boundaries for the systematic review and determines the characteristics that must be included or excluded from the study. In this chapter, the inclusion criteria were set from both two- and four-year institution perspectives, peer-reviewed journals, and book chapters published between 2005 and 2020, so as to best address current issues and interventions for undergraduate college students with respect to academic advising approaches with the use of technology. Given the focus on academic advising serving undergraduate students, literature that concentrated on K-12, master, and doctoral students were excluded.

Several education research databases were used, including, Education Source, ERIC, Educational Administration Abstracts, and Oxford Bibliographies Online to narrow down scholarly articles (see Table 14.1). Additional open access, peer-reviewed, academic mega journal databases, such as SAGE, Web of Science, Scopus, and Springer, were selected. Additionally, we accessed NACADA academic advising professional network (NACADA, 2017; Pasquini & Eaton, 2019) to navigate peer-review journals relating to the topic. Lastly, Google Scholar search engine was used with the same keywords to capture relevant research articles that might have been missed in the previous research database. The keywords that included "humanizing advising", "academic advising", "humanizing technology", and

Table 14.1 Search Engines, Databases, Academic Articles and Books, and Keywords Used to Synthesize Literature

Database	Library weblink	Date of access	Keywords	Number of articles/books
Education Source	https://www. ebsco.com/ products/ research- databases/ education- source	10/14/2020 (last access)	academic advising in higher education or academic advising or advising or advisor AND online advising	178 articles
ERIC Institute of Education Sciences	https://eric. ed.gov/	10/14/2020 (last access)	academic advising in higher education or academic advising or advising or advisor AND online advising	376 articles (academic journals; books)
Educational Administration Abstracts	https://www. ebsco.com/ products/ research- databases/ educational- administration- abstracts	10/14/2020 (last access)	academic advising in higher education or academic advising or advising or advisor AND online advising	7 articles

"COVID-19 remote learning" helped saturate the literature database. To maintain focus on this integrative literature review, each peer-review journal that was germane to this topic was screened in alignment with the inclusion and exclusion criteria.

A thorough examination of empirical studies scholarly journals (see Table 14.2) revealed three main and common themes, namely, humanized advising, technological engagement, and online community. All three themes structurally demonstrate coherence around the interrelated challenge to humanize the use of technology in academic advising settings. We begin by showing how literature engages with each theme, subthemes, and the various issues or arguments surrounding each one. We then demonstrate gaps in the

Table 14.2 Categorization of Reviewed Interventions Involving Technology for Academic Advising

Nature of methodology, study, or report	Article(s) involving this form of methodology
Book/ Book Review	(Frost, 2000; Glass et al., 2021; Knight, 2008; McDonald, 2008; Nutt, 2000; Pentland, 2010)
Case Study	(Amador & Amador, 2014; Neuwirth et al., 2020; Steele, 2016)
Conceptual Framework	(Chang & Gomes, 2017)
Secondary Data Analysis/ Archival Study	(Gutiérrez et al., 2020; Hayes, 1841; He & Hutson, 2016; Kimble-Hill et al., 2020; Lester & Perini, 2010; Mastrodicasa & Metellus, 2013; Michigan Department of Health and Human Services, 2020)
Literature Review	(Cass & Hammond, 2015; Castañeda & Selwyn, 2018; Kimball & Campbell, 2013; Kuhn et al., 2006; McClellan, 2007; Narita, 2018; Shahjahan, 2019; Williamson et al., 2020)
Mixed Methods	(Gray et al., 2010; Sobaih et al., 2020)
Population Study	(Hu, 2020)
Qualitative Study	(Feghali et al., 2011; Gyamera & Burke, 2018; Kalamkarian & Karp, 2017; McGill, 2018; Museus & Ravello, 2010; Pasquini & Eaton, 2019; Zhang, 2016)
Quantitative Study	(Ahlquist, 2020; Bickle & Rucker, 2018; Gemmill & Peterson, 2006; Joosten et al., 2013; Junco et al., 2016; Loucif et al., 2020; Pasquini & Steele, 2016; Schwebel et al., 2012; Thompson & Prieto, 2013)
Systematic Review Committee/ Conference Report	(Catalano, 2013; Chan et al., 2019) (NACADA, 2017; Stanoevska-Slabeva & Schmid, 2001)
News Report	(Beckstein, 2020; Durrani, 2020; Flaherty, 2020; West, 2020)

Note: This table does not delineate the specific form of data collection and types of evidence collected in the methodology.

literature by rhetorically asking whether the theme is in congruent with the overarching claim.

Findings

Humanize Advising

Humanizing is a constant process of being our authentic self. A number of studies have recently conceptualized that humanizing is becoming more conscious in the interconnectedness of visible and invisible nature of being (Narita, 2018; Shahjahan, 2019). In the context of US higher education, humanizing academic advising matters because the academic advising professional competencies value student engagement and purposeful communication through technology (NACADA, 2017). To conceptualize,

Kuhn et al. (2006) describes humanized advising as the advisor helping the advisee by levelling themselves empathically, in which, advising actualizes the advisee's developmental process through authentic caring. In the discussion of academic advising, Kuhn et al. (2006) claimed that the academic advisor must meet the needs of the student as part of the humanizing experience. On one hand, Chan et al. (2019) argued that the concept of academic advising varies across different academic disciplines. On the other, others have maintained that humanizing academic advising signifies its multifaceted role within the institution that includes relationship practice (Amador & Amador, 2014; Junco et al., 2016; Mastrodicasa & Metellus, 2013), student outreach (Pasquini & Steele, 2016; Schwebel et al., 2012), and student support (Gutiérrez et al., 2020; McDonald, 2008; Steele, 2016). Needless to say, most researchers have a shared understanding that the role of academic advisors is vital to support college students (Chan et al., 2019; Kuhn et al., 2006). In essence, the core philosophy of humanizing academic advising is centering on student caring (NACADA, 2017). Our own view is that students will relate to and respect advisors who are genuine and caring.

Hence, academic advisors need to make a conscious effort to use technology as part of the humanizing experience for all students based on their capacity. The theme of humanized advising leads to the second theme that academic advisors need to be purposeful while engaging with students through technology.

Technological Engagement

To (re)imagine what technology is, in its purest form, we propose that technology is a way for humans to communicate or a bridge between the human-to-technology-to-human interaction. We observed that the consumption of online technology has become a top priority for many US higher education institutions. However, as briefly mentioned in the previous section, excessive technology usage causes disruption and negative impact to student support by inducing stress to students (Gemmill & Peterson, 2006). Using a 71-item survey to 299 undergraduate students, Gemmill and Peterson (2006) found that excessive attachment to technology creates high stress among college students. Consequently, Steele (2016) asserts that academic advisors play a pivotal part in helping students to balance their experiences and relieve their stress through the intentional use of technology. Both studies shed insight that advisors play an important role to help students find balance and intervene with care.

General Challenges

We are currently in an unprecedented situation with COVID-19 and in this new crisis, limited research exists on the pandemic's impact on higher education. However, there is a palpable understanding that it has awakened higher education institutions to the critical role academic advisors play in sustaining student engagement and learning through technology (Hu, 2020; Loucif et al., 2020). This pandemic gives new life to the conversation surrounding the discussion of in-person advising and that of remote or distant advising that utilizes technology.

Kalamkarian and Karp (2017) and Neuwirth et al. (2020) suggest that significant challenges accompany the use of technology in that the subtlety of humanistic connection, such as the ability to read body language, listen to speaker's tone and voice, and watch for minutiae facial reactions, may be lost. We argue that this is especially visible during the COVID-19 pandemic and with online classes, students will become more used to technology than human interaction. Additionally, students have had to make the shift abruptly and may not welcome this sudden technological pivot. Kalamkarian and Karp (2017) find, using focus group interview data from 69 students at six colleges, that students "preferred in-person interaction with an advisor" (p. 14). Furthermore, students "prefer in-person support for more complex undertakings, such as planning courses and refining their academic and career goals" (Kalamkarian & Karp, 2017). The essence of Kalamkarian and Karp's (2017) argument is that academic advising in a virtual space loses the humanistic people-to-people connection and that technology may not necessarily create a supportive environment for students.

On the other hand, Amador and Amador (2014) take on the critiques offered by Kalamkarian and Karp to envision how academic advisors befriend students by humanizing whole personhood into the technological virtual space. They argue that focusing on communicating clear expectations increases student's help-seeking behavior, deepens their college experiences, and strengthens the student-advisor relationship. Having a clear technological boundary between the student-to-advisor spheres will advance their relationship and trust to account for student's academic progression and therefore be aligned with the humanized approach.

In the end, we agree with researchers' conclusions that to actualize academic advisor's roles to serve in the best interests of students, technology must be viewed and used as a bridge and as a point of connection (Amador & Amador, 2014; Hu, 2020; Kalamkarian & Karp, 2017; Loucif et al., 2020; Neuwirth et al., 2020).

Indeed, Mastrodicasa and Metellus (2013) confirmed in their secondary data analysis that "[m]ost college students come to campus with multiple technology devices, using their devices for reasons both academic and personal" (p. 21). Both Lester and Perini (2010) and Mastrodicasa and Metellus (2013) support each other's claim that the 21st and the 22nd generation of college students have the technological capacity (i.e. smart devices) to be engaged in virtual spaces.

However, literature also shows that not all students are alike, and engagement looks different for different people and needs (Museus & Ravello, 2010; Thompson & Prieto, 2013). By employing a qualitative study, Museus and Ravello (2010) reified that purposeful engagement is a multifaceted approach in serving the student's need because "problems are rarely isolated to one aspect of their college experience" (p.54). The essence of Museus

and Ravello's (2010) argument is that when students—especially Students of color—have an academic strain or difficulty in their coursework, their situation is often compound with financial strains, accessibility to technology strains, and much more. Thompson and Prieto (2013) also affirmed, after surveying 121 college students from a historically Black university located in the South, that students who have financial strains have strong correlation to technological strain and that in turn resulted in a lack of motivation to engage with academic advisors. To be explicit, literature suggests that purposeful engagement is not one size fits all, in which academic advisors are not allknowing how technological engagement looks like for all students and their capacity to engage. Thus, for advisors to engage students with a clear purpose, higher education institutions also need to make conscious effort to meet the needs of the student when students do not have the technology capacity. Especially in the ongoing COVID-19 pandemic, research clearly reveals the significant minoritized students do not have the necessary technology to remote learning (Kimble-Hill et al., 2020).

Positive Outcomes

Research shows that the virtual technological connection enhances academic advisors to communicate with students (Junco et al., 2016). Junco et al. (2016) also found that alternative forms of communication such as email, texting, and social media have a positive impact on student's college experience.

In the discussion of positive impact in the use of technology, one controversial issue has been purposeful technological engagement. Literature claims that the advancement of technology accelerated the accuracy of students' academic performance data on demand (Feghali et al., 2011; Loucif et al., 2020; Williamson et al., 2020) and advisors' capacity to provide justin-time student outreach (Amador & Amador, 2014; Thompson & Prieto, 2013; Zhang, 2016). That said, technology can also increase the accessibility for students and advisors and enhance relationship-building and individualized student learning (Cass & Hammond, 2015; Hu, 2020; Zhang, 2016). Lester and Perini (2010) even maintain that higher education institutions first need a paradigm shift to see what engagement should look like for college students because they grew up socialized, plugged in with technology and continuously connected in virtual spaces. Through a quantitative study, Ahlquist (2020) further complicates that technological purposeful engagement is for higher education institutions to exert efforts to engage with students because doing so establishes a meaningful sense of belonging to the university. Our view is that technology should be a tool to enhance the advising experience for students. Put plainly, technology is one bridge to the advisor-student advising experience and relationship-building.

Online Community

When it comes to the topic of online community, most scholars agree that it is a form of support. Where this agreement usually varies, however, is on the question of typology. Whereas some attention is on technological online platforms (Stanoevska-Slabeva & Schmid, 2001), others maintain that social interactions and interpersonal relationships of human beings should be the center of discussions (Bickle & Rucker, 2018). While some emphasis should be put on the technicalities of online platforms, we should be careful not to overlook the affective qualities (e.g., a shared sense of inter-being) of human beings (Shahjahan, 2019). Ultimately, what is at stake is whether online communities build connection and support mechanisms for students.

Although Sobaih et al. (2020) found that students use technology to support each other by "building an online community and connection" (p. 14), McClellan (2007) maintains that an online community is to "love and the capacity to grow and develop as human beings are nurtured through community" (p. 43). Accordingly, the academic advising profession values that a strong community will "[c]reate rapport and build academic advising relationships" with students (NACADA, 2017). Nevertheless, the COVID-19 pandemic has created uncertainties and changes in student needs—lack of access to technology and other digital devices—that academic advisors continue to find alternative academic advising modalities when there are issues of technological shortcomings (Hu, 2020). Finding alternate modalities matters because advisors may not always have the capacity to ensure that all students' needs are met. Of course, many will probably disagree with my assertion of limited advisor capacity because academic advising may look differently in various academic disciplines at different institutions.

One implication of capacity building via online community, as literature emphasizes, is that technology has the ability to scaffold in a generalized group academic advising setting and to sustain a community environment of support and caring (Amador & Amador, 2014; Cass & Hammond, 2015; Zhang, 2016). For example, Cass and Hammond (2015) found that virtual community among student veterans "allow students to very quickly find the right community member who holds the expertise they need, when they need it ... [similar mindset as] soldiers to go to war as a team; there are no singular acts in the military" (Cass & Hammond, 2015). Zhang (2016) also found among the international students instances in which international students feel supported when advisors serve as a mentor "via virtual communities that provide an online social space for individuals to communicate and interact with each other" (p. 167). Overall, literature claims that having a strong online community increases the support with one another (Sobaih et al., 2020). The theme of technological engagement with students leads to opportunities to integrate technology in a humanized way.

Opportunities for Integrating Humanized Technology in Academic Advising

The COVID-19 pandemic highlights some important gaps in research on humanizing technology usage in advising. We assert that technology was largely utilized as a supplemental tool (i.e., email follow up after the advising session) and has moved in the social distancing reality to be the main mode of advising (i.e., real-time virtual advising via Zoom). There is also an opportunity in this pandemic season to be thoughtful about the deep stress and exhaustion that technology might impose post COVID-19 era. Second, no literature thus far provides deep insights on whether students' deep stress and exhaustion with technology in the post-COVID-19 era requires us to seek alternative advising methods—micro check ins or flip advising where the student takes the lead in the advising session to meet the specific student needs—to shorten the traditionally long advising session. Especially in the time of COVID-19, students may be overly exhausted with technology (i.e., Zoom fatigue) compounded with familial obligations (e.g., caring for the elderly or purchasing food) to merit additional exploration.

Thirdly and most importantly, students who commonly need the most help are those who do not seek help (Museus & Ravello, 2010), which merits further investigation and analysis whether academic advising through technological integration helps in closing (or widening) the graduation gap for certain student social identities or demographics (Feghali et al., 2011). Data shows that not all students have the technological capacity to be connected to the internet during the COVID-19 pandemic (Neuwirth et al., 2020), let alone engage with academic advisors through technology. So far, few scholars have contended to "equalized technology-mediated advising structure" (Hu, 2020) and "create a more equitable environment" (Kimble-Hill et al., 2020). We contend that there is a significant gap and data in the existing literature showing student's technological ability to be constantly connected to the internet. Consequently, in the post-COVID-19 era, higher education should think of new ways to engage and to help students through the lens of technological equity.

Lastly, literature urges that there are a myriad factors to ensure the safety and security of online communities between academic advisors and students. Lester and Perini (2010) cautioned of privacy concerns and risk of "transmitting personal information in an online environment" (p. 73). In a quantitative study, Joosten et al. (2013) warned that the use of online community platforms such as Facebook or Twitter must protect student's education records and should neither be publicly shared without the informed written consent of the individual student. While we believe in security assurance, we also believe online communities must also comply with the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). Joosten et al. (2013) further argues that advisors can find ways to build a trusted community support with students within the legal boundaries so that public information can be shared timely and effectively. For example, using the online community as part of the general university announcements or calendar of events. Linking

theory with intentional practice, Kimball and Campbell (2013) indicate that community-building is a complex and challenging process, so academic advisors must critically reflect on the fact that students' needs are different, student demographics are different, and safely and securely support students should be individualized and highly cared for because situation is unique for different people.

In the same vein, research also shows that integrating humanized technology in humanized advising must be deployed strategically and timely (Amador & Amador, 2014; Cass & Hammond, 2015; McClellan, 2007; Zhang, 2016). For instance, academic advisors need to reflect student engagement critically and strategically in the lens of the student (Joosten et al., 2013; Kimball & Campbell, 2013; Lester & Perini, 2010). By connecting from the lens of a student to advisors, many scholars argue that technology such as learning analytics will both advance and accelerate the accuracy of student data collection in a secured fashion (Gutiérrez et al., 2020; Loucif et al., 2020; Pasquini & Eaton, 2019) and enhance the capacity of academic advising to reach students in virtual community spaces (Amador & Amador, 2014). We agree that learning analytics will assist academic advisors to see both micro and macro patterns of students' academic performance because my academic advising experience confirms it. We would caveat that community members need to respect community norms and not disclose private information without consent. Likewise, technology will significantly increase institutional ability to record online videos and modules for students to review the basic academic information (i.e., course selection) and will also develop a deeper philosophical discussion (i.e., major exploration) through group advising (He & Hutson, 2016).

Discussion

Findings from this systematic review offer a few considerations to higher education educators, administrators, and policy makers for incorporating new institutional strategies, practices, and interventions that support the academic advising experience for students. These considerations are not meant to be generalizable. Rather, they introduce a basis for further discussion and study.

Putting theory into practice, higher education institutions can explore whether there are sufficient technological resources for academic advisors and all students. Second, institutions may need to elicit students' voices that are underserved and underrepresented to learn how to best care for their academic advising needs with technology support. Namely, when decisions are made fast, that is when institutions are not checking out biases and including the people in the conversations who need to be included. For example, many universities that went online may not understand fully about the needs of low-income students who did not have access to technology/internet or Black students who would soon experience significantly higher positivity rates of COVID-19 (Michigan Department of Health and Human Services, 2020). In other words, to humanize the academic advising experience the human or

student must be put in the center of advising as well as institutional decisionmaking. For the students who can be technologically connected, how will higher education institutions ensure students' voices and messages are heard or seen in an equitable way?

Recommendations for Practice

- Examine synchronous and asynchronous class schedules to ensure that students remain engaged with the university (i.e. providing a peermentoring program for students to build relationships and connection to campus).
- Adopt a systematic assessment of campus climate for diversity, equity, and
 inclusion to understand how students are feeling during remote learning
 with technology such as social isolation and classroom experience.
- Evaluate student learning outcomes in relation with institutional retention, persistence, and graduation rate to allow for meaningful opportunities for students to reflect on their experiences (inside and outside the classroom).
- Introduce a multifaceted approach to target different student populations (demographics, class level, SES, etc.) for understanding different degree of access to technology for institutional investment.
- Examine instructional processes to maintain high quality teaching and learning and provide short-, mid-, and long-view to improve course instructions that can be executed through multiple modalities concurrently and sustainably.
- Ensure institutional investment in technological resources (i.e., laptops, webcams, headsets) to achieve educational equity for student learning. The effective delivery of academic advising services online may require additional funding for enhanced technology and software licensing, therefore strategic investment or reinvestment in resources and programs to support students, especially at a time of crisis, must be prioritized by institutions.
- Provide space for intercultural communication and dialogues to promote a
 deeper understanding of challenges in remote learning environment, and
 shed light on reducing implicit bias, microaggression, marginalization,
 discrimination, and educational and technological inequities.
- Offer accessible courses in technology literacy or incentivize courses related to technological learning as part of a student's graduation requirement. For example, all students must be expected to obtain technology literacy before graduation.

Future Research

This integrative review widens the discussion on humanizing academic advising with technology in higher education and offers a baseline for future research on the topic. First, academic advising in different disciplines within

different institutions in the context of various countries could be considered. Second, future research may delineate student demographics within the context of student persistence and retention rate. More specifically, whether minoritized students remain stagnant or become less persistent and retentive because of the institutions' lack of support in providing sufficient technology capacity and resources. Third, literature also shows due to pre- and post-COVID-19 challenges, academic advisors are already shouldering a heavy load to find alternative advising modalities from in-person to on-line to ensure that students are effectively continuously to engage in learning (Hu, 2020; Kimball & Campbell, 2013; Thompson & Prieto, 2013). The COVID-19 pandemic is expected to change students' paradigms about advising as new students will only be accustomed to online advising. Hence, future research should explore whether overuse of technology causes academic advisors' overwhelming workload and stress, and whether this may lead to negative affect to the advising experience for students in the technological era. Fourth, researchers should further explore the institutional value in the work of academic advising as there is a significant disconnect in the literature between advisors' overextensive labor and institutional leaders' cost-cutting fait accompli strategies amid COVID-19. Lastly, and perhaps most importantly, as our student population are growing more diverse, fluid, and transient, we may need to see beyond western advising philosophies to best meet the needs of our student community. To be specific, we propose that future research must look beyond the western national container and expand into the Eastern and Indigenous philosophies that interconnect the visibility of technology with the invisibility of inter-being (Shahjahan, 2019). In other words, the meaning and utility of technology may contextualize differently in different parts of the world, so it behooves us to acknowledge where our epistemology comes from in relation to the rest of the world.

Conclusion

In this chapter, we demonstrate how humanizing academic advising with technology impacts student interaction, engagement, and community-building with academic advisors. The overarching claim suggests that academic advising needs to focus on putting the human in the center of the student experience (i.e., technology-to-human-to-human-to-technology), and not technology (Castañeda & Selwyn, 2018; Selwyn, 2016). It identified humanized advising, student engagement, and community-building as three overarching themes emerged in this integrative literature review. It further discussed various issues or arguments in each theme, strengths, and weaknesses in the literature, and gaps for future research.

While literature was thoroughly examined, it was somewhat surprising that no literature interrogated the effects of minoritized students in academic advising due to the lack of capacity and access to technology. Outside of the higher education journals, there is evidence that minoritized students

(i.e., Students of color) have the greatest need for online engagement and the largest disproportion accessing technology (Kimble-Hill et al., 2020). Kimble-Hill et al. (2020) concluded that the disparate impact of technological inaccessibility will be "the loss of income, skill development, and professional networking opportunities gained during a summer internship could irreparably disrupt and even permanently derail educational journeys for thousands of marginalized students" (p. 3393). Sadly, racial and ethnic minority (non-White) students are often overlooked and marginalized (Museus & Ravello, 2010). Worse, there is neither data nor mentioned for the Native Indigenous students in the literature relating to their academic advising experiences with technology.

We argue that humanizing academic advising with technology is even more important to less privileged students because humanizing is closely tied to the important issues of diversity, equity, and inclusion that higher education institutions embrace in an increasingly globalized and technologized world. So, in full circle we ask: how can we design technology that humanizes academic advising, and how can we measure the humanizing academic advising experience for *all* students?

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Exploring Contemporary Issues and Challenges

Edited by Ravichandran Ammigan | Roy Y. Chan | Krishna Bista

Foreword by Darla K. Deardorff



Praise for this book

This book is a must-read for all university leaders and senior managers to enable them to get a better insight into the numerous challenges facing academia in the new normal, where it is not only about academic excellence but also about the human dimension through the enhanced use of technology.

—Dhanjay Jhurry, Professor and Vice-Chancellor, University of Mauritius, Mauritius

This thought-provoking book captures contemporary changes to higher education at the micro and macro level post-2020. Stakeholders across the sector will benefit from reading the research-driven chapters that are stimulating and insightful. The book interrogates and challenges ways in which internationalization and global mobility can be re-imagined.

—Dawn Joseph, Associate Professor, Deakin University, Australia

This book shows a more intensive and multi-facetted response by the higher education community to the pandemic that one might have expected. Attention is paid notably to sustain international life on campus.

—Ulrich Teichler, Professor Emeritus, International Centre for Higher Education Research, University of Kassel, Germany

This volume is a welcome addition to the literature on international Higher Education produced during the COVID-19 era. With a sensitively chosen array of topics, it shows new thinking around internationalisation, which is encouraging for all, and is exactly what is needed.

—Amanda C. Murphy, Professor and Director, Centre for Higher Education Internationalisation, Università Cattolica del Sacro Cuore, Italy

With the COVID-19 pandemic seeing no end in sight and its effects on international higher education for students around the world yet unknown, the importance of this timely book cannot be overstated. At a time when we are

literally awash in countless editorials prognosticating on *possible* implications of this health catastrophe, it is refreshing to get a carefully collected series of essays that step back, take a deep breath, and bring us back to the fundamental questions we need to be asking at this most dangerous time for humanity.

—Bernhard Streitwieser, IEP Program Director & Associate Professor of International Education & International Affairs, George Washington University, USA

This is a valuable addition to higher education for understanding the complexities that COVID-19 introduced into the academic landscape. This volume explores valuable topics and issues such as employability, research and mentoring, innovative teaching and learning, and emerging opportunities during the pandemic.

—Jane E. Gatewood, Vice Provost for Global Engagement, University of Rochester, USA

This timely book is much needed for practitioners, scholars, and policy makers who are grappling with the challenges created by the pandemic. The book is comprehensive given the depth and breath of topics. The human centric approach is refreshing.

—Fanta Aw, Vice President of Campus Life & Inclusive Excellence, American University, USA

COVID-19 and Higher Education in the Global Context: Exploring Contemporary Issues and Challenges

COVID-19 and Higher Education in the Global Context: Exploring Contemporary Issues and Challenges addresses the lasting impact of the novel coronavirus (COVID-19) in the higher education sector and offers insights that inform policy and practice. Framed in a global context, this timely book captures a wide variety of topics, including student mobility, global partnerships and collaboration, student health and wellbeing, enrollment management, employability, and graduate education. It is designed to serve as a resource for scholar-practitioners, policymakers, and university administrators as they reimagine their work of comparative and international higher education in times of crisis. The collection of chapters assembled in this volume calls for a critical reflection on the opportunities and challenges that have emerged as a result of the global pandemic, and provides as a basis for how tertiary education systems around the world can learn from past experiences and shared viewpoints as institutions recalibrate operations, innovate programs, and manage change on their respective campuses.

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In memory of those who lost their lives during the COVID-19 pandemic worldwide

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Foreword

Darla K. Deardorff

The COVID-19 pandemic has represented a unifying challenge globally, providing a defining era in human existence as the pandemic upended life as we know it. *COVID-19 and Higher Education in the Global Context: Exploring Contemporary Issues and Challenges*, edited by Ammigan, Chan, and Bista, delves into the pandemic's impact on higher education around the world. Such an exploration empowers "educators, administrators, practitioners, policy makers, and families" with ideas and guidance that not only can be applied in the current context but also in the post-COVID future.

As the world emerges from the COVID pandemic, it is good to remember the signs of hope that have been there all along from the small gestures of kindness to the heroic efforts of those on the frontlines, from strangers lifting their voices together in song across balconies as the pandemic began with the later Jerusalema dance challenge that swept around the world, even as the pandemic was raging. This pandemic has shown us that we are all truly interconnected, for better or for worse. Desmond Tutu reminds us that we are all in this together and that our humanity is bound up together. We are members of one human family, and when some members are hurting, we all are hurt. He goes on to say, "For us to engage in the practices that will ensure that we all prosper, we must come to know that each of us is linked in the chain of our common humanity."

As we move into the light of a new day, there is radical hope in truly embracing our shared humanity. Let's seek to see ourselves in others. Let's seek to see the whole picture through discovering others' perspectives beyond our own. Let's seek to see the invisible among us and to remember the power of being seen and heard. As we do so, we can reflect on some of the following questions:

- What do I know about my neighbors?
- Do I make an effort to learn more?
- What are others' perspectives and can I articulate those?
- What are the connections I see in others to my own experiences?
- How much do I really listen for understanding and seek first to understand?

Higher education provides opportunities for students to explore these and other questions, as universities seek to educate global citizens. As we have come to understand more poignantly over the last year that we are indeed part of one global community, we need to remember that education is more than employment or even graduating global citizens—in the end, it is about how we come together as neighbors both locally and globally, to build a better future together. We can make choices every day that help make the world better for all. As Tutu noted, "When we step into our neighborhoods, we can engage in the practices of good neighborliness or we can choose not to. The quality of life on our planet now and in the future will be determined by the small daily choices that we make as much as by the big decisions in the corridors of power." As we move forward into a post-pandemic era, we must remember that actions matter and what we do impacts others. What daily actions will we take to support the most vulnerable among us? To improve the quality of life for others? How will we uphold justice and dignity for all in the human family? In the end, how will we be good neighbors to each other?

Let us commit to taking action to address the racial injustices and inequities faced by our neighbors. Let us commit to being a good neighbor, as we live in authentic solidarity with each other, aspiring to be compassionate, generous, and kind, knowing that we can find our greatest joy in showing love to all and that in doing so, we are embracing the oneness of our humanity.

Bio

Darla K. Deardorff is the Executive Director of the Association of International Education Administrators, a national professional organization based in Durham, North Carolina, USA. She is also a research scholar with the Social Science Research Institute at Duke University, where she has been an adjunct faculty member in the Program in Education and a faculty affiliate with International/Comparative Studies. In addition, she is an Adjunct Professor at North Carolina State University, a Visiting Research Professor at Nelson Mandela University in South Africa, and at Meiji University Research Institute of International Education (RIIE) in Japan as well as visiting faculty at Shanghai International Studies University (SISU) in China. Dr. Deardorff has served on faculty of Harvard University's Future of Learning Institute as well as Harvard University's Global Education Think Tank, in addition to being on faculty at the Summer Institute of Intercultural Communication in Portland, Oregon. She has also been an affiliated faculty at the University of North Carolina—Chapel Hill, and Leeds Beckett University (formerly Leeds Metropolitan) in the United Kingdom and taught at Thammasat University in Bangkok, Thailand. She receives numerous invitations from around the world (in over 30 countries including in Europe, Latin America, Africa, Australia, and Asia) to speak on her research and work on intercultural competence and international education assessment, and is a noted expert on these topics, being named a Senior Fulbright Specialist (to South Africa and to Japan).

Dr. Deardorff has published widely on topics in international education, global leadership, and intercultural learning/assessment, and has published eight books including as editor of *The SAGE Handbook of Intercultural Competence* (Sage, 2009) as well as lead editor of *The SAGE Handbook of International Higher Education* (Sage, 2012) with Hans de Wit, John Heyl and Tony Adams, *Building Cultural Competence* (Stylus, 2012) with Kate Berardo, and co-author of *Beneath the Tip of the Iceberg: Improving English and Understanding US American Cultural Patterns* (University of Michigan Press, 2011). She is also the author of the recently published book on *Demystifying Outcomes Assessment for International Educators: A Practical Approach* (Stylus, 2015) and co-editor of *Intercultural Competence in Higher Education: International Approaches, Assessment, Application* (Routledge, 2017) with Lily Arasaratnam-Smith. Her seventh book *Leading Internationalization* (Stylus, 2018) is with Harvey Charles, and her most recent book is *Manual on Developing Intercultural Competencies: Story Circles* (Routledge/UNESCO, 2019). E-mail: d.deardorff@duke.edu