

Online Learning Post-COVID: Faculty caring in the eyes of university students

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Abstract. The escalation in online learning post-COVID has created a pressing need to consider faculty-student interactions in a virtual environment. A sequential explanatory, mixed-method design was used to investigate university students' perceptions of faculty caring online following the COVID-19 pandemic. Participants were 46 undergraduate and graduate students enrolled in one of four programs offered either fully online or with a significant number of required courses offered in an asynchronous online format at the same university in a single semester. Results from the Student Perspectives of Caring Online Survey indicated participants' feeling strongly about effective communication, specifically a detailed class calendar with a schedule and due dates as well as clear instructions regarding expectations for online communications, as a faculty behavior that conveyed caring. Qualitative data supported this finding and indicated that empathy and support from faculty were also highly valued. Implications of findings for online teaching practices are presented.

Keywords: caring, COVID-19, online learning, mixed methods

Introduction

The 21st century brought the arrival of virtual classrooms and online learning (Dalgarno, 2002). In 2016, 14% of higher education students in the United States were enrolled exclusively in distance or online programs with noted enrollment growing in following years (Allen & Seaman, 2016; Seaman et al., 2018). The international public health emergency created by Coronavirus Disease 2019 (COVID-19) resulted in a sudden, far-reaching move to distance learning during the 2019–20 and 2020–21 academic

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school years. During the pandemic, approximately 300 universities in the United States transitioned from on-campus to online learning (Foresman, 2020). Online learning quickly became the major delivery format for most institutions of higher learning across the country and around the world (Chien et al., 2022). In March 2020, what had until then been a relatively marginal method of instructional delivery suddenly became the norm, with all students expected to begin learning online and to continue doing so into the foreseeable future (Martin, 2020; O'Shea et al., 2021).

The research literature prior to 2020 identified online learners as most likely to be older students, females, have family responsibilities, be employed, and/or enrolled part-time (Ilgaz & Gülbahar, 2015; Kahu et al., 2013; Michael, 2012; O'Shea et al., 2015). Müller (2008) concluded that the "access, flexibility, and convenience" of online learning were key to enabling women "with multiple commitments in their lives" to pursue further education (p. 1). Similarly, online learning was noted as beneficial for "adult learners who have employment, family and/or other responsibilities ... by saving travel costs and allowing a flexible schedule" (Park & Choi, 2009, p. 207). In response to the COVID-19 pandemic, large-scale implementation of online education occurred for the first time by many institutions of higher education (Miyoshi et al., 2022). This shift away from traditional classrooms to massive participation in online learning is predicted to remain post-pandemic as online learning continues to be widely used with college students in various areas and disciplines (Idrizi et al., 2021; Shi & Fan, 2023). As a direct result of the COVID-19 pandemic, online learning has become much more mainstream, now holding an essential place in higher education because it better meets the needs of a wider range of students by providing a more flexible learning experience (Lockee, 2021; Stone, 2022). This normalizing of online education has increased the need to consider aspects of online instruction and their impact on students' knowledge to deliver online learning more effectively (Miyoshi et al., 2022; Stone, 2022). As adult students continue to select hybrid or exclusively online learning options to advance their education, it is imperative to address how this trend influences faculty-student interactions, particularly regarding students' perceptions of faculty caring.

Online Learning

Robinson and Ikeda (2002) define the term online education as referring to education and learning provided via a network. In online learning, virtual classrooms "can be expandable in time, space, and content" (Beatty, 2013, p. 156). Learning can be synchronous, which means that instruction is provided "live" with students learning at the same time or asynchronous with students enrolled in the same course learning at different times (Çakýroglu, 2014). Although virtual learning environments possess many of the same characteristics as physical classrooms, they lack of the same limitations (Hussein, 2016). In online learning, interaction among students and teachers may be facilitated using several different types of media, such as video conversation, oral communication, annotated texts, audio chat, and narrated PowerPoint presentations (Yadav, 2016). Two-way communication, interaction, discussion (Marković

et al., 2021), student-centered instruction, engaging lessons (Baker et al., 2022), a strong sense of teaching presence (Lambrinidis, 2014; Stone & Springer, 2019), and an effort by instructors to connect with their students (Devlin & McKay, 2018; Stone, 2017) have all been cited as important aspects of effective teaching in an online delivery format.

Advantages

One noted advantage of online learning is that it provides both teachers and students with greater convenience and accessibility. Another advantage is that students are in greater control of their learning experience as the faculty role shifts towards more coaching and mentoring (Boettcher & Conrad, 2016). Since students largely retain command over time, speed, location, and interactions with the instructor and other students, asynchronous online learning often appeals to those who may be older, raising children, or working while taking college courses (Ilgaz & Gülbahar, 2017). Further, Alahmadi and Alraddadi (2020) found that online classrooms encouraged students to communicate with each other as well as with their instructors and helped reticent students overcome their anxiety to participate in class conversations.

Disadvantages

An obvious disadvantage to online learning is problems such as technical issues, intermittent disconnection, and equipment malfunction that may emerge. Technological difficulties, such as signing on and microphone issues, have been identified as obstacles to participation in virtual environments (McBrien et al., 2009).

Another disadvantage is that online learning may trigger negative emotions such as anxiety and worry resulting from a lack of familiarity with the learning environment or limited opportunities for socialization (Chien et al., 2022), especially for first-time online students (St. Clair, 2015). Bettinger et al. (2017) reported lower levels of success for students enrolled in fully online courses, in that they tended to earn lower grades and make less progress in college than students who attended traditional classes, resulting in lower program retention. Additionally, Butz et al. (2015) observed considerably higher levels of technology-related fear, anger, and helplessness for online learners when compared to students attending classes on campus.

A recognized challenge facing students in online learning environments is feelings of separation or inaccessibility (Kara et al., 2019). Some of the most frequent negative feelings experienced by online learners include frustration, isolation, anxiety, and confusion (Abdous, 2019; Hara, 2000). In previous research by Leader-Janssen et al. (2016) investigating perceptions of online learning, graduate students described their need for instructors to engage directly with students in the course. Similarly, another

study with graduate students revealed limited or insufficient communication—between faculty and students as well as among students—often created a sense of isolation (Zembylas, 2008).

Video conferencing tools, like Blackboard Collaborate, Zoom, Microsoft Teams, and WebEx provide a means of simultaneously bringing participants together virtually (Leader-Janssen et al., 2016; Moallem, 2015). These tools can be used to provide multi-modal, synchronous interaction in an online environment using a combination of text, audio, and video. Although studies with undergraduates indicated a preference for online courses with a synchronous component noting that these provided a greater connection to the course (Ragusa & Crampton, 2018; Skylar, 2009), the lack of synchronous elements in online courses remains because of the impact they have on the flexibility and convenience of online learning (Raza et al., 2020). Including some authentic interactions through multi-modal technologies seems key in potentially emulating the interaction and connectiveness offered in a in person environment while still affording students the flexibility they desire in online learning (Gilpin, 2020).

Caring Online

The field of online learning extensively explores the concept of learner support, with a focus on communicative aspects between teachers and students as a means of establishing relationships and communicating care. For example, a study exploring the perceptions of students at a private, liberal arts college in the United States, found that constructive feedback (whether electronic, written, or face-to-face) along with direct and regular communication can contribute to students' perceptions of being cared for by faculty (Carr et al., 2021). Similarly, Robinson et al. (2020) noted opportunities for non-academic conversations, quick email responses, and soliciting input as supporting students' perceptions of care. High school students in an online environment reported several aspects of communication (i.e., continuous contact, teacher-initiated dialogue, the promptness of the teacher's reply) as well as access to teachers as indicators of caring (Velasquez et al., 2013). While foundational in nursing education and practice, the specific concept of care rarely appears in literature related to online learning outside of nursing and other health disciplines despite a growing body of evidence suggesting that faculty caring positively influences student learning and achievement of caring behaviors (Jezuit et al., 2020). Caring occurs in relationships where there is respect authenticity, support, and shared knowledge while basic needs are met. Faculty behaviors indicative of caring convey genuine empathy and concern for their students as individuals as well as their comfort in the learning environment and their academic success. Such behaviors aim to humanize virtual learning and further students' cognitive development and scholastic achievement while also meeting their social and emotional needs (Jones et al., 2020).

While faculty caring may gain greater attention during a global pandemic due to increased stress and anxiety, a centrality of care is a fundamental aspect of being a teacher and considered by some to be an element of culturally sustaining pedagogy (Kono & Taylor, 2021). Despite presumed agreement that caring is an important part of instructional effectiveness, there is no clear consensus regarding how

care is conveyed to students in virtual environments. Investigations of how caring is demonstrated online can be approached from the perspective of instructors or the eyes of students (Kızılcık & Türüdü, 2022). The purpose of this study was to investigate university students' perceptions of faculty caring online following the COVID-19 pandemic. Specifically, the following research question was examined: which faculty behaviors are deemed by students as most important for communicating caring?

Methods

Researchers used a sequential explanatory, mixed-method design to determine university students' perceptions of caring for faculty teaching online courses one year after COVID-19. The study was conducted at a public, doctoral-level university accredited by the Southern Association of Colleges and Schools. The university is located within an urban city in the Gulf Coast region of the United States. All participants were enrolled in the College of Education and Professional Studies, which consists of approximately 1,800 students in a variety of programs across five departments offering bachelors and graduate level degrees.

Participants

Participants were a convenient sample ($n = 46$) of undergraduate ($n = 28$) and graduate students ($n = 19$) completing one of the following programs: Early Childhood Studies (ECS) B.S., Interdisciplinary Studies (IST) B.S., Elementary/Early Childhood Education (EEC) M.Ed., and English for Speakers of Other Languages (ESOL) M.Ed. All programs are either offered via fully asynchronous online learning or with a significant number of required courses offered in an asynchronous online format. Participants were predominantly White females ranging in age from 19 to over 46 years old (see Table 1). This demographic composition is representative of the United States teaching profession (Taie & Goldring, 2020), and most of the participants were enrolled in teacher preparation programs.

Instrument

Quantitative data were collected using the *Student Perspectives of Caring Online Survey*, which Jezuit et al. (2020) adapted from the work of Sitzman (2010). The survey contains 24 Likert-like items. For each item, respondents read a statement that described a potential online instructor behavior and rated the behavior as 4 (*extremely important*), 3 (*moderately important*), 2 (*somewhat important*) or 1 (*not important*). For this study, the researchers added four demographic questions (age, gender, ethnicity, and major).

Table 1. Participant demographics

Variable	Quantity
Gender	
Male	1
Female	45
Age	
19–30 years old	17
31–45 years old	13
46+ years old	16
Ethnicity	
White	28
African American	14
Hispanic or Latino	1
Native American	1
Biracial	1
Degree program	
Undergraduate	24
ECS	6
IST	18
Graduate	18
EEC	17
ESOL	1

Note: Not all values total 46 because some participants did not answer all questions (Ethnicity = 45 and Degree Program = 42).

Data Collection and Analysis

Permission to use the *Student Perspectives of Caring Online Survey* was obtained, and the study was approved by the university's Institutional Review Board. Responses to the survey served as quantitative data. Data were collected from students enrolled in one of five programs (two undergraduate and three graduate) taking courses offered in an asynchronous online format at the same university in a single Spring semester. The participants were sufficiently informed about the study and consented to participate. Participation was voluntary, and no incentives were provided. The survey was administered through Qualtrics during a 14-day period with a reminder sent via email seven and thirteen days after the survey initially deployed to 274 students (214 undergraduates and 60 graduates). After two weeks, 46 students responded resulting in a response rate of 17 %, which exceeds the expected range of 11% (Lozar Manfreda et al., 2008) to 13% (Daikeler et al., 2020) for web surveys.

Qualitative data were collected from the same participants completing the survey using a follow-up questionnaire two weeks after the survey was completed. The questionnaire, which was intended to allow for elaboration upon or clarification of quantitative results, elicited a written response to the open-ended question “Are there any specific behaviors by faculty of your online courses that communicate their caring? If so, what where they?”

Table 2 Student perceptions of caring online survey overall results

Item	Instructor Behavior	Mean	SD
1	Responds within 24–48 hours.	3.68	0.64
2	Responds on weekends.	2.41	1.01
3	Mindfully addresses student challenges as soon as they become evident and offers support to help get the student back on track.	3.20	0.83
4	Recounts previous challenges and shares possible remedies.	3.27	0.83
5	Expresses the belief that students will be successful in the online settings.	3.46	0.67
6	Provides clear instructions regarding schedules and due dates.	3.88	0.39
7	Provides a detailed class calendar.	3.90	0.30
8	Provides clear instructions regarding acceptable social behavior in the online classroom.	3.33	0.75
9	Provides clear instructions regarding acceptable length/quality of required online communications.	3.83	0.38
10	Provides students with the opportunity for face-to-face meetings.	2.63	1.16
11	If face-to-face meetings are not possible, arranges for a web camera exchange to “see” and interact with the instructor in real time.	2.77	0.99
12	Provides scheduled telephone availability.	3.05	0.91
13	Provides an e-mail address outside the course homepage.	2.68	1.18
14	Provides a discussion board thread dedicated to student questions and concerns.	2.90	0.93
15	Provides virtual office hours with scheduled chats.	3.20	0.83
16	Posts a casual (conversational) personal introduction.	2.75	1.09
17	Shares informal glimpses of self by posting fun/personal photographs.	2.15	1.12
18	Discusses hobbies or extracurricular activities.	2.13	1.00
19	Discusses past scholarly work and professional experiences.	2.51	0.89
20	Provides (at minimum) weekly praise and encouragement.	2.80	1.08
21	Provides supportive/corrective guidance to individual students.	3.02	1.07
22	When responding to student work, refers to specifics.	3.34	0.98
23	Verbalizes enthusiasm for learning.	3.20	0.83
24	Demonstrates respect for the learning process through excellence in creating/presenting online content.	3.49	0.67

The quantitative data were analyzed using descriptive statistics of means and standard deviations and then compared with the research question. The collection and analysis of qualitative data followed the analysis of quantitative data to augment the quantitative results (Hanson et al., 2005). More specifically, the rationale for including a subsequent qualitative investigation of university students' perception of specific faculty behaviors that communicate caring was to achieve what has been designated as complementary findings (Greene et al., 1989), which serve the purpose of expounding, enhancing, illustrating, or illuminating the results achieved using one method with the results achieved using the other method.

Twenty-two participants (48%), including graduate (15) and undergraduate (7) students, responded to the open-ended question. All participants were female (White = 9, African American = 1, Hispanic or Latino = 1) between the ages of 19–45 years old. Qualitative data were analyzed and coded to determine the factors students perceived to be indicative of faculty caring. During the first phase of qualitative analysis, two of the four researchers independently performed a content analysis of the questionnaire responses to determine the frequency of certain words, phrases, or concepts. Comments having relevance to the research question were recorded. Similar statements, which ranged from a few words to multiple sentences, were grouped together, and statements in each group were then collectively examined for themes. Four thematic categories emerged, and each statement was then coded and reviewed for accuracy to determine the total number of responses per category.

Results

Survey item means ranged from 2.13–3.90. Table 2 shows abbreviated versions of all 24 items along with the means and standard deviations. Items 6, 7, and 9 had a mean greater than 3.8 with a standard deviation of less than 0.40 representing participants' feeling strongly about item criteria. These three items all relate to the instructor's ability to communicate effectively. The two items with the lowest means (17 and 18) both related to getting to know faculty outside of their role as course instructors.

Open-ended responses from 22 participants were coded into the following categories: Clear Course Communication, Individual Feedback, Course Interaction, and Empathy and Support. The total number of responses per category is shown in Table 3.

The most noted category was Empathy and Support, which appeared 32 times. This category included comments related to faculty being understanding and/or encouraging as well as their willingness to support students by making accommodations such as extended time for assignments or opportunities for extra credit when warranted. Individual Feedback had the second highest number of responses (30 times) and included comments referencing both quick and personalized replies to emails as well as timely and detailed comments regarding performance on assignments. Sample comments for each theme are provided below:

Clear course communication

“Organization and detailed nature of how the courses were structured.”

“Emails and Canvas announcements.”

“Weekly emails and reminders.”

“Very detailed in what she expected from each assignment.”

“Would always introduce the material in her emails. She always gave us extra information to guide us into the new week.”

Individual feedback

“Responded to me in a timely manner” and “I received responses quickly.” (prompt)

“Replied to submission comments,” “gave me a lot of feedback,” and “I have received detailed and authentic feedback on assignments, projects, and tests.” (personalized)

Course interaction

“Actively engage with me in online discussion and activities” and “recording themselves” (engagement)

“Available for office hours” and “She also sets up time on Tuesdays to Zoom with her students.” (availability)

Empathy and support

“She also understood that sometimes life happens,” “genuine concern,” “said how much she appreciated our hard work,” “made me feel confident in my abilities,” and “sent me encouraging words” (understanding/encouraging)

“Extended deadlines” and “They were quick to acknowledge and address any technical difficulties that arose and made sure that I had the resources and support I needed to overcome them.” (supportive)

Discussion and integration of results

Consistent with the findings of Velasquez et al. (2013), the faculty behavior perceived as most important for conveying caring by participants in this study was the use of good communication, which was evidenced by both quantitative and qualitative results. Quantitative results revealed effective communication in the form of explicit directions for instructional activities, a detailed schedule, and

clearly stated expectations for both performance and participation, as well as specific and personalized individual feedback as extremely important by participants. In the qualitative data, one participant stated, “This [feedback] helped me feel that my work was valued and that my instructor was invested in my success.” This finding is comparable to those of Miyoshi et al. (2022), who concluded that the absence of interaction that naturally occurs between faculty members and students in face-to-face classes creates a greater need for faculty to prepare teaching materials in advance and clarify class structure to facilitate a strong sense of faculty involvement. Similarly, Velasquez et al. (2013) noted that a teacher’s efforts in designing and developing a course can increase students’ experiences of care. Additionally, participants’ qualitative responses noted a high regard for faculty’s expressions of empathy and added support in times when personal difficulties interfered with the student’s ability to meet stated course expectations. For example, one participant shared, “When I had my miscarriage this semester, . . . one of my instructors sent me encouraging words and allowed me to give her a time frame that extended beyond my doctor’s excuse to get all my work turned in.” A participant who experienced the close, consecutive deaths of two family members commented that faculty provided assistance and offered opportunities to make-up missed work when it was possible to do so. She continued by saying, “Even if they couldn’t [alter requirements], the fact of them being a listening ear was very helpful and that made a world of difference.” Similarly, another participant stated, “It’s always uplifting when a professor takes time to recognize you as an individual and not just a name behind a computer.”

In this study, participants’ experience was limited to asynchronous online courses. Several previous studies comparing asynchronous to synchronous online instruction found that students were willing to sacrifice the flexibility and convenience impacted by real-time components in favor of increased interaction. For example, in a study of 40 undergraduate preservice teachers, almost three-fourths of the students indicated a preference for online courses that use synchronous video conferencing technologies as opposed to courses relying on text-based asynchronous technologies (Skylar, 2009). In another study, graduate students revealed a similar preference for synchronous course delivery primarily because of the increased contact with peers, which was perceived as supporting their learning (Bonnici et al., 2016). Synchronous components, however, did not appear in either quantitative or qualitative results as influencing perceptions of caring for participants in the current study as much as effective communication.

Participants in this study seemed to value an instructor’s ability to communicate effectively as a stronger indication of caring than their effort to connect with students in real time. For the two quantitative survey items mentioning real time components (face-to-face and virtual meetings), there were lower means with greater variance in responses than the items related to communication. This could be attributed to some participants’ interpretation of required synchronous activities as a limited recognition of or lack of regard for students’ commitment/responsibilities outside of class, such as parenting or working.

Unlike Lambrev and Cruz (2021) who reported students' positive perception of faculty's revealing aspects of their personal lives as a means of establishing an emotional connection, participants in this study perceived faculty's sharing information about themselves with students as the least important in terms of communicating caring. This perception could be a result of students viewing any off-topic sharing as an unworthy/insignificant/meaningless use of their valuable time.

Quantitative item means ranged from 2.13–3.90 with only three item means below 2.5 seeming to indicate that participants perceived all behaviors identified on the survey as at least somewhat important for communicating caring. Qualitative data corroborated these findings with several participants noted the importance of faculty to “be there,” as opposed to the “several professors that I have had where it seems they have posted the content on Canvas and then disappeared.” One participant explained that “By being available, empathetic, and invested in their students' success, professors can create a supportive and engaging learning environment that enhances students' experiences and fosters lifelong love of learning.”

Limitations

Certain limitations should be acknowledged. One is the limited generalizability of findings resulting from the use of a convenience sample at one university and small sample size. The second is the use of self-report data. Another limitation is the noted shortcomings of self-report data (Sallis & Saelens, 2000) and recognition that relationships between variables may be obscured due to socially desirable reporting even when participants remain anonymous (van de Mortel, 2008).

Implications

There are theoretical and practical implications related to faculty caring, faculty-student relationships, or faculty support. These can be vital characteristics of higher education experience. These concepts reflect the degree to which faculty members support their students on academic, personal, and emotional levels.

Theoretical implications

Student engagement

Self-determination theory indicates students are more likely to be engaged and motivated when they feel supported by faculty. Intrinsic motivation to learn can be enhanced by faculty who exhibit sincere concern in students' achievement.

Attachment theory

Attachment theory suggests that students can form secure attachments with their instructors. When students feel safe with faculty, they may be more open to learning resulting in greater growth.

Social cognitive theory

Social cognitive theory proposes that students learn by observing and interacting with peers, mentors, and faculty. When students encounter individuals who demonstrate caring behaviors, they are more prone to assume those behaviors themselves, which can promote a constructive learning environment.

Practical implications

Academic success

Faculty caring can impact academic success. In classes where faculty create an environment with a positive classroom climate, good communication, respect, and inclusivity, meaningful learning experiences and respectful interactions among students can occur. When faculty establish connections with their students, they gain insights into individual needs and better understand effective teaching methods. When students feel cared for by faculty, they are more likely to ask for help, complete various class requirements, and as a result, perform better on assignments.

Mental health and well-being

Students often experience stress, anxiety, and other mental health challenges when working toward a college degree. Faculty members who express care, demonstrate understanding, and listen to students' issues can provide a valuable support system, helping students navigate during challenging times and connecting them to appropriate resources.

Retention and Graduations: Academic success along with mental health and well-being can contribute to students remaining enrolled in an academic program and graduating. Students who feel connected to their faculty and peers are more likely to persevere through challenges, complete their degrees, and find fulfilling professions.

Life after college

Faculty caring goes beyond academics. Students often turn to their faculty for guidance on career choices, personal development, and life advice. Strong relationships with students can serve as a foundation for

mentorship, contributing to students' growth beyond the classroom and university setting.

Conclusions

To ensure quality online instruction resulting in students' academic achievement along with sensitivity towards their emotional-social well-being, continuing professional development and performance improvement for online faculty are essential. In addition to technological proficiency required for effective online instruction, both personal and pedagogical competencies of faculty teaching online courses must be considered. Not all faculty members with the same content knowledge and academic expertise are equally adept at skillfully delivering computer-generated instruction and creating conducive virtual learning environments; therefore, it should not be assumed that all qualified faculty are capable of effectively teaching online courses. Careful consideration must be given to which faculty would be the best possible candidates for teaching online, and these individuals must be fully supported in their endeavors and recognized for their achievement.

Even though the COVID-19 pandemic may have forced many courses online unexpectedly, there was already a shift toward distance learning in higher education which is likely to continue in a post-COVID-19 pandemic world. The results of the current study indicate that online students highly value an instructor's diligence in ensuring that they convey accurate and explicit information in a timely manner with both undergraduate and graduate students placing extreme importance on effective communication as an indicator of faculty caring.

These findings reveal the importance of unique dispositions and teaching competencies that convey caring in online courses. While further research with more demographically diverse participants across a greater geographic area is recommended to corroborate findings in this study, it seems clear that students desire online instructors who convey a perception of thoughtfulness and concern. To improve learning and optimize virtual learning experiences for university students, faculty are encouraged to implement strategies that demonstrate caring behaviors and are deemed significant by students. To do this effectively, student voice must be considered in course development.

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