

Lessons Learned During the COVID-19 Pandemic: Techniques for Successful Remote Learning and Teaching

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Abstract

Using the descriptive research methodology, the authors administered an online survey to 234 undergraduate business students via Qualtrics software. Respondents completed 31 inquiries about online learning characteristics related to the advantages of online learning and problems or challenges they have faced. The survey also included questions regarding potential student characteristics required for success in online education and perceptions of the best and worst practices in online education.

The results identify the value of online courses focused on learning and retaining rather than courses concerned only with merely "getting the question right." Data also suggests that students favor interactive activities to mend the online communication gap between students and professor(s). Overall, students recognize that online courses require a substantial amount of work and that specific embodied qualities of successful students, including excellent time management skills and being independent and responsible. The findings help craft a "road map" for online course structure and content.

Keywords: Remote learning, online pedagogy, COVID-19, student success

Over the past years, the COVID-19 pandemic has caused massive changes across higher education. Teaching modalities have undergone a massive shift in favor of online and hybrid formats. Changes have been rapid, widespread, and uneven. Educators at all levels continue to work to distill the best practices in this "new normal." One recent study indicated that the most

successful strategies in coping with the COVID-19-induced move online were interactivity in online courses, clear and regular communication and reminders, and flexibility and empathy in responding to students' challenges (Attree, 2021). This research aims to extend this and similar work, focusing on student impressions of the recent online experience to gain insights into online best and worst practices.

Online teaching and education in business programs is not a new or novel concept. While many AACSB-accredited programs continue their commitment to traditional, on-campus degree programs, new programs, and continued course offerings are still prevalent online. In other words, online learning is here to stay, even as COVID-19 restrictions have faded. Drawing on results from research on business undergraduates, this research identifies best practices directly from students forced into this COVID-19 modality, even if online learning was not their initial preference. This study will help educators identify the path forward for online education, specifically identifying the benefits, advantages, problems, and challenges associated with online learning during the COVID-19 pandemic.

Undergraduate higher education still feels the ripples of the forced, rapid move to online instruction in 2020. This research project builds upon two existing pillars of business education research. First, it is impossible to escape the large and growing body of research into the pandemic experience and its lessons for business educators. Second, this research is inseparable from pre-pandemic research regarding best practices in online education.

Significance of the Study

Demand for online courses continues to grow. The pandemic forced many courses online, and while in-person learning has returned, the online space for course delivery remains crucial. This movement continues to face challenges. Studies pre- and post-pandemic show that, despite all the new technologies, flipped classrooms, and the like, most students' first choice for learning was to listen to the instructor's lecture in person (Banerjee & Olson, 2020; Jackson et al., 2011). In the face of this environment, it is more important than ever to determine what works in online learning. In the present study, the authors seek to identify strategies for enhancing the quality and effectiveness of online education.

In-person and online courses differ significantly in terms of instructional methods, student engagement, and opportunities for interaction, as is widely recognized. In-person courses often provide rich opportunities for face-to-face interactions, nonverbal communication, and immediate feedback, which can be challenging to replicate online (Banerjee & Olson, 2020). As a result, if one does not take special care to design and deliver interactive and engaging online courses, much is lost regarding student engagement and learning outcomes. To address these challenges, the authors aim to identify methods for improving the online learning experience and enhancing the comprehensiveness of online course materials. This includes exploring ways to integrate interactive learning opportunities, foster student engagement, and provide timely feedback to online students.

Rather than viewing the opportunities and challenges of different course modalities as mutually exclusive, the authors seek to identify opportunities for advancement in the rapidly evolving educational landscape. By identifying effective strategies and best practices for online education, the authors hope to contribute to the ongoing efforts to improve the quality and accessibility of education for all students, regardless of their geographic location, learning preferences, or personal circumstances.

Purpose of the Study

The purpose of the study was to identify the path forward for online education, specifically identifying the benefits, advantages, problems, and challenges associated with online learning. The study aims to answer the following questions:

1. How did the COVID-19 pandemic impact the future of online learning?
2. What are student impressions about best practices in online course design?
3. What are student opinions about the characteristics of a successful online learner?
4. From a student perspective, what online course design features are deemed daunting or unproductive?

Review of the Literature

The following section explores the foundational literature that formed the research questions and survey instrument. The authors categorize this content as (a) pandemic impacts, (b) online best practices, and (c) preparing students for the workplace.

Pandemic Impacts

No part of the education system was immune from the pandemic. Attree's (2021) student interview study indicated that the most successful strategies in coping with the COVID-19-induced move online were interactivity in online courses, clear and regular communication and reminders, and flexibility and empathy in responding to student challenges. The importance of clear and consistent communication echoes in the work of Morgan (2020), which focused on primary education settings.

The pandemic environment impacted more than just students. It is important to note that faculty stress levels surrounding the shift to online and blended learning have significantly increased after the onset of the pandemic, specifically concerning technology stress, contributing to lost productivity, absenteeism, and job turnover (Boyer-Davis, 2020). Moving forward, educators and administrators must identify and implement best practices to effectively transform online learning while protecting precious faculty resources (and their well-being); faculty and students must strike a balance to cultivate the most effective use of time. Some research has also emphasized that keeping to a clear, consistent schedule in the wake of

COVID-19 disruptions was the best approach to create a sense of community and ease student anxiety (Olson & Kenahan, 2021). In addition, the willingness to institute course design changes to meet new circumstances was key to student success.

Regarding the pandemic move, one of the immediate difficulties was access to the necessary technology. Many institutions assume that students have the necessary technology to undertake online learning. However, research shows that this is a real barrier for some. The U.S. Census Bureau highlighted that geographic, socioeconomic, and demographic factors played a significant role in shaping disparities in broadband internet access across the United States. Regarding geography, states on the Pacific Coast and most in the Northeast, including New Hampshire and Massachusetts, outperformed the national average (77%) in broadband internet use. The higher level of internet access in these states was associated with higher income levels, suggesting that socioeconomic factors also contributed to the digital divide (Ryan & Lewis, 2017).

Moreover, the data revealed disparities in access to technology and broadband internet among racial and ethnic groups. Asians were most likely to have a desktop or laptop, handheld device, and broadband subscription, with about 80% of the population reporting this combination. In comparison, 65% of Whites reported having all three items, while lower rates were observed among Hispanics and Blacks, with 55% and 49%, respectively.

These disparities underscored that the digital divide persists in the United States, with certain groups facing barriers to accessing technology and broadband internet. This divide can have far-reaching implications, as access to technology and the internet is increasingly important for education, employment, and communication. Thus, disparities in access to technology and broadband internet can create barriers to online learning for certain groups. Without reliable internet access and appropriate devices, students may struggle to participate in online courses and access learning materials.

Additional research based on census data has shown that income and the share of the population with a bachelor's degree or higher both positively impacted broadband subscription rates (Martin, 2019). Analysis of census data further demonstrates a rural/urban divide in access. Urban residents were more likely than rural residents to use computing devices (93% of urban households compared to 89% of rural households) and were more likely to have any sort of internet subscription (86% of urban households compared to 81% of rural households) (Malone, 2021).

Globally, for example, Sari and Nayir (2020) surveyed educators and administrators in Turkey and found that infrastructure issues were the largest barriers to the pandemic move online. Research in Pakistan similarly noted the importance of implementing technology, such as learning management systems (LMS), and, importantly, in training faculty on using those new methods (Rafiq et al., 2021). In a survey of Irish students, Yang (2021) noted that business students responding to a survey did find a variety of positives from the pandemic move online

(citing flexibility as the leading benefit) but overall preferred the in-person experience, citing a lack of interaction as the leading negative of the move online.

The pandemic underscored the importance of adaptable online education strategies and highlighted the digital divide. Key success factors included interactivity, communication, and flexibility while addressing faculty well-being and technology access disparities. Overall, the pandemic emphasized the need for effective online education that promotes access and equity in technology.

Online Best Practices

There is already a well-established body of research on the characteristics of a successful online learning experience, including the foundational work of Garrison et al. (2000), which suggested that online learning could be conceptualized as a "Community of Inquiry," wherein students and faculty interact with course content in cognitive, social, and teaching presences. The Community of Inquiry (CoI) model is a key framework for online learning that emphasizes the importance of three core elements: Social, Cognitive, and Teaching Presence (Garrison, 2011). Social Presence fosters a sense of community and facilitates meaningful interactions among students. While Cognitive Presence promotes critical thinking and knowledge construction, enhancing the depth and quality of learning. Finally, Teaching Presence provides structure, guidance, and feedback, supporting students' learning experiences. Together, these elements create a rich and effective online learning environment. The present survey builds on this past work.

Pre-pandemic research expanding on the Community of Inquiry (CoI) model highlighted students' differing perceptions about the role of instructors in online and in-person learning environments. According to Gering et al. (2018), students expected the in-person instructor to take a more traditional role, where they "lecture and explain" the course material, providing direct instruction and serving as the primary source of knowledge.

In contrast, students perceived the role of the online instructor to be more focused on facilitating learning by "guiding and providing resources." This suggests that students expect online instructors to take a more supportive and facilitative approach, helping students navigate the learning process and providing them with the tools and resources to construct knowledge independently. In this context, the online instructor is a guide and mentor rather than a sole source of information. These distinctions between the perceived roles of instructors in online and in-person learning environments have implications for how educators approach their teaching practice. In online education, instructors may need to adapt their teaching strategies to align with students' expectations and provide a supportive and resource-rich learning environment.

A successful online learning environment includes interactions among students, interactions between instructors and students, and the collaborations in learning that result from these

interactions (Palloff & Pratt, 1999). By fostering these online communities, participants' educational experience may be heightened (Palloff & Pratt, 2007).

Past studies have shown that contact by email appears beneficial, with frequent out-of-class communications positively associated with student learning and perceptions of instructor rapport (Sidelinger et al., 2015). Furthermore, students identified that frequent email use by instructors outside of traditional classrooms led to an increased perception of instructor capability and led students to rate the affective experience positively (Ledbetter & Finn, 2018).

A central theme among all these characteristics is the importance of student-instructor interaction. Research has shown that an increased frequency of interactions is generally associated with higher levels of student satisfaction (Cornelius-White, 2007). Furthermore, interpersonal interaction is a critical factor in successful online learning (Vlachopoulos & Makri, 2019).

Park and Kim (2020) concluded that using an interactive communication tool (Microsoft Teams in their study) in online learning fostered strong student-instructor interactions and promoted students' perceptions of instructor presence, eventually enhancing student engagement and satisfaction in online classes. While many students, including a significant portion of respondents to the present survey, preferred in-person formats, much of the research generally measures online experiences as positive for students (Spencer & Temple, 2021).

Roseland and Saeger (2022) recently emphasized the importance of an intentional approach to course design and online education. Building on the acknowledged importance of presence, their case study supported an approach founded in course design using the CoI model, emphasizing an instructor as a facilitator of discourse and incorporating direct instruction as appropriate. This study builds on those ideas and furthers the research on these concepts.

The Community of Inquiry (CoI) model, comprising Social, Cognitive, and Teaching Presence, is key to online learning success. In-person instructors are seen as direct instructors, while online instructors are facilitators. Strong interactions, communication, and intentional course design based on the CoI model contribute to positive online learning experiences.

Preparing Students for the Workplace

Preparing students for online success also develops carryover skills that are key to success in their future careers. Mastery of key soft skill competencies known as the 4Cs: creativity, critical thinking, collaboration, and communication are crucial to academic and professional success (Thornhill-Miller et al., 2023). In the workplace, creativity helps employees develop innovative products, services, and solutions, setting companies apart from their competition. Emerging technologies, such as artificial intelligence and virtual reality, also present opportunities for creative applications in academia and industry. Online success requires students to evaluate digital content and information sources critically. In the workplace, critical thinking allows employees to make sound decisions, troubleshoot issues, and assess the feasibility of new

ideas. As technology evolves, employees will increasingly rely on critical thinking skills to navigate complex and dynamic situations. Online learning environments often involve group projects and team-based activities, which help students build collaboration skills. In the workplace, collaboration is vital for working in teams, cross-functional departments, and with external partners. As technology facilitates global communication, the ability to collaborate across cultures, time zones, and virtual platforms becomes increasingly important. Furthermore, the rapid development and integration of new technologies will also aid and change the contexts, resources, and implementation of the 4Cs. As a result, the increasing use of artificial intelligence, virtual reality, and other technologies makes 4C-related skills increasingly vital to human work (Thornhill-Miller et al., 2023).

Strong communication skills are necessary for online success, as students must communicate with instructors, peers, and group members in virtual settings. Employers highly value effective communication skills, as employees must communicate with colleagues, customers, and stakeholders. Advancements in technology, such as video conferencing and messaging platforms, also change how people communicate, making adaptability a key component of effective communication. Since employers value effective communication skills, developing these soft skills should be integrated throughout a business curriculum (Kleckner & Marshall, 2023).

In summary, the 4Cs—creativity, critical thinking, collaboration, and communication—are essential soft skill competencies for online success and future careers. As technology develops and integrates into various aspects of life, the contexts and methods of applying the 4Cs will also evolve. Therefore, integrating the development of these soft skills into educational curricula, including business curricula, is crucial for preparing students for the demands of the modern workforce.

Research Design and Methodology

This section outlines the study's population, data collection procedures, validity and reliability measures, and sources. The study used the descriptive research design consisting of an online survey of undergraduate business students as the primary data source. It used Qualtrics software at an AACSB-accredited business school during the Fall 2021 semester. In a descriptive research design using surveys, data can be summarized using measures of central tendency and reported as frequencies and percentages. Frequencies and percentages represent the number of times a response occurs and the proportion of responses in each category, respectively, highlighting the distribution of responses. These techniques help the authors identify trends and patterns in the survey data.

Validity and Reliability

Three certified e-learning educators, experts in e-learning and teaching modalities,

evaluated the survey instrument to ensure its content validity. We present the final instrument in Appendix A.

We evaluated the internal consistency of the research instruments using Cronbach's alpha, a widely utilized statistical measure of reliability. The instrument consisted of three sections: benefits of online courses, challenges associated with online learning, and qualities and characteristics required for online learning.

We calculated Cronbach's alpha separately for each section to assess the reliability of the items within each section. The value of Cronbach's alpha ranges from 0 to 1, with higher values indicating greater internal consistency. A score close to 1 indicates that the items in the questionnaire are highly correlated with each other and offer a consistent measure of the underlying construct.

The results of Cronbach's alpha analysis for each of the three sections of the research instruments provide insight into the questionnaire's high reliability and internal consistency, as presented in Table 1.

Table 1

Reliability of Scales

<i>Item</i>	<i>N</i>	<i>Cronbach's alpha</i>
Benefits of Online Courses	15	0.93
The Challenges Associated with Online Learning	16	0.90
The Qualities and Characteristics Required for Online Learning	10	1.00

Respondents completed 31 inquiries about online learning characteristics related to the advantages of online learning and their problems or challenges. We provided a seven (7) point Likert scale for responses. The survey also included a Likert scale inventory of ten (10) potential student characteristics required for success in online learning. We gave survey participants five (5) open-response subjective questions about their perceptions of the best and worst practices in online education. We invited 297 students to participate in the survey and received 234 complete responses, resulting in a 79 percent response rate. We present their demographics in Table 2.

Table 2

Respondent Characteristics			
<i>N = 234</i>			
Category	Subcategory	Percent	Count
Gender	Female	39.74	93
	Male	59.83	140
	Prefer not to say	0.43	1
Age	17-29	97	226
	30-39	2.15	5
	40-49	0.43	1
	50-59	0.43	1
	60 and above	0.00	1
Race	American Indian or Alaska Native	0.43	1
	Asian	3.40	8
	Black or African American	4.68	11
	Hispanic or Latino	2.98	7
	White	87.23	205
	Prefer Not to Answer	1.28	3
Classification	Freshmen	2.99	7
	Sophomores	21.79	51
	Juniors	43.59	102
	Seniors	31.20	73
	Graduate	0.43	1
Prior online course experience	Yes	98.72	232
	No	1.28	3
Experience with computer	Very Limited	0	0
	Limited	0.43	1
	Somewhat Limited	1.71	4
	Neutral	15.38	36
	Somewhat Proficient	35.04	82
	Proficient	36.32	85
	Very Proficient	11.11	26

This studied university is in a college town in the southeastern region of the United States, and White students (87.23%) contribute to most of the university population. Most of the respondents were male (59.83%) and juniors (43.59%), of traditional age (97%) with prior

online course experience (98.72%), and somewhat proficient or better with computer experience (82.47%).

The research subject pool included student respondents from eight separate classroom sections. The course sections drew from various disciplines across the AACSB-accredited College of Business university. The surveyed sections included both online and in-person learning environments. Most respondents were from the Fundamentals of Formal Communication courses, 32.92%, followed by the Fundamentals of Business Law online, 24.28%, and the Fundamentals of Business Law face-to-face (F2F) section, 13.99%, respectively, as presented in Table 3.

Table 3

Course Participants

N = 243

<i>Courses</i>	<i>Percent</i>
Accounting Law: ACC 440 (F2F)	8.64
The Fundamentals of Business Law and Ethics: BUS 204 (F2F)	13.99
The Fundamentals of Business Law and Ethics: BUS 204 (Online)	24.28
The Fundamentals of Interpersonal Business Communication: BUS 207 (F2F)	0.00
Entrepreneurship: CCT 270 (Online)	10.70
The Fundamentals of Formal Communication: BUS 301W (F2F and Online)	32.92
International Business Communication: CCT 310 (Online)	9.47
Integrated Corporate Communication: CCT 550/750 (Online)	0.00

Note. Respondents may select more than one course.

Research Findings & Discussion

We divided the analysis of student-perceived lessons learned during the COVID-19 pandemic online learning into the following three categories: (a) benefits of online learning, (b) challenges associated with online learning, and (c) qualities and characteristics required for online learning.

Benefits of Online Learning

Respondents completed 15 inquiries about online learning characteristics related to the advantages of online learning. We provided a seven (7) point Likert scale for responses. Most respondents, 35.78%, believed that online courses offer flexibility, 35.34% felt that they teach

self-discipline, 33.05% strongly agreed that online courses are convenient, 31.76% felt that online courses increase independence in learning, and 38.20% believed that online courses allow for working at one's own pace. However, the respondents did not see online courses as a medium to meet interesting people, as presented in Table 4.

Table 4

Benefits of Online Courses

N = 233

<i>Criteria</i>	<i>%</i>							<i>Mean</i>	<i>Median</i>	<i>Mode</i>
	<i>SD</i>	<i>D</i>	<i>SD</i>	<i>N</i>	<i>SA</i>	<i>A</i>	<i>SA</i>			
1. Online courses offer flexibility.	0.43	0.43	3.45	4.74	18.97	36.21	35.78	5.93	6.00	7.00
2. Online courses teach me to be self-disciplined.	1.29	1.72	2.16	5.17	21.55	32.76	35.34	5.84	6.00	7.00
3. Online courses are convenient.	0.86	1.29	3.43	3.86	25.75	31.76	33.05	5.80	6.00	6.00
4. Online courses increase independence in learning.	0.86	1.72	3.86	6.44	18.45	36.91	31.76	5.78	5.00	5.00
5. Online courses allow me to work at my own pace.	2.15	3.00	4.29	2.58	20.60	29.18	38.20	5.77	6.00	7.00
6. Online courses bring education right to my home.	1.72	3.43	3.43	7.30	21.03	28.76	34.33	5.66	6.00	6.00
7. Online courses help me in promoting online research and resources.	0.00	2.58	4.29	15.45	24.03	28.76	24.89	5.47	5.00	5.00
8. Online courses provide updated and authentic information.	0.43	1.72	4.72	21.89	23.61	29.18	18.45	5.28	2.00	1.00
9. Online courses have financial benefits.	5.15	10.30	6.87	23.61	18.45	17.17	18.45	4.65	4.00	4.00
10. Online courses connect me to the global village	3.02	8.19	9.91	27.16	22.84	15.09	13.79	4.59	4.00	6.00

11. Online courses give me access to a huge amount of knowledge.	3.43	9.87	17.60	12.02	26.18	17.17	13.73	4.54	5.00	4.00
12. Online courses offer more individual attention.	9.44	13.30	10.73	14.59	21.46	17.17	13.30	4.30	6.00	7.00
13. Online courses promote life-long learning.	9.44	12.88	12.02	18.88	15.45	20.17	11.16	4.23	6.00	6.00
14. Online courses give me real-world skills.	12.02	13.30	9.01	21.89	19.74	15.02	9.01	4.05	5.00	4.00
15. Online courses help me meet interesting people.	28.33	24.46	15.45	15.88	4.29	7.73	3.86	2.82	5.00	6.00

Note. SD = Strongly Disagree D = Disagree SD = Somewhat Disagree N = Neutral SA = Somewhat Agree A = Agree SA = Strongly Agree

The findings suggest that many respondents appreciate the advantages of online courses, particularly their flexibility and the opportunity to learn at their own pace. The flexibility and the ability to learn at one's own pace are particularly valuable for individuals with busy schedules and diverse responsibilities, such as working professionals, parents, and those balancing personal commitments. This allows them to acquire new skills and knowledge in a way that fits their lifestyles and needs.

The perception of online courses as a convenient and independent way of learning also has implications for accessibility and inclusivity. Online courses can provide opportunities for individuals in remote or underserved areas to access education and training that may not have been available to them otherwise. This can help bridge the gap in educational opportunities and contribute to a more equitable society.

Self-discipline is a crucial skill in today's fast-paced and technologically advanced world, enabling individuals to manage their time effectively, prioritize tasks, and stay motivated. Individuals can cultivate this skill by engaging in online courses, leading to increased productivity and efficiency in various aspects of their lives. Furthermore, the respondents' recognition of online courses as a means of developing self-discipline has important implications for personal and professional development.

The findings suggest that while online courses have many benefits, they also may lack opportunities for social interaction and connection in the online world. In a traditional, in-person classroom setting, students can interact with their peers and instructors face-to-face. This can lead to forming meaningful relationships and a sense of community, an essential aspect of the learning experience. However, in online courses, these opportunities for social

interaction may be limited or absent. This can result in feelings of isolation and disconnection for some learners.

The lack of social interaction in online courses can affect collaborative learning and soft skills development. In the real world, teamwork and communication are crucial skills in many professional and personal settings. Traditional, in-person classes often provide opportunities for group projects and discussions, which can help students develop these skills. However, online courses may offer a different level of interaction and collaboration, which could limit the development of these essential skills. This social interaction, a key element of the CoI model, is perhaps the most difficult element to cultivate and remains a challenge to online education.

Overall, the findings suggest that online courses hold significant potential for enhancing accessibility, inclusivity, and skill development. Embracing online learning can help individuals overcome barriers to education and training and foster critical skills essential for success in today's rapidly evolving world. While online courses offer many benefits, it is necessary to recognize and address the limitations regarding social interaction and connection.

The Challenges Associated with Online Learning

Respondents completed 16 inquiries about problems/challenges related to online learning. We provided a seven (7) point Likert scale for responses. Most respondents, 59.31%, emphasized the need for reliable internet access at home to participate in online courses effectively. Furthermore, 48.05% of respondents recognized the importance of good time-management skills for success in online courses. Over 35% of respondents felt that the online environment could create a sense of social isolation and that they needed to find their learning path. As expected, 30.57% of respondents reported missing personal interactions with their peers, highlighting the lack of face-to-face interaction in online courses, as presented in Table 5.

Table 5

The Challenges Associated with Online Learning

N = 231

	%									
Criteria	SD	D	SD	N	SA	A	SA	Mean	Median	Mode
1. Online courses require reliable internet at home.	0.00	0.43	1.30	5.63	7.79	25.54	59.31	6.35	5.00	5.00
2. Online courses require good time-management skills.	0.00	0.43	1.30	3.03	13.42	33.77	48.05	6.23	5.00	5.00
3. Online courses may create a sense of social isolation.	2.16	1.73	3.46	11.26	19.91	26.41	35.06	5.65	6.00	7.00

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4. Online courses require that I must find my learning path.	0.00	1.73	4.33	19.48	23.81	32.90	17.75	5.35	6.00	7.00
5. I miss the personal interaction with my fellow students.	4.80	5.24	3.93	16.59	15.72	23.14	30.57	5.25	5.00	4.00
6. Online Courses are only effective in certain subjects.	2.63	4.82	6.58	17.11	21.49	22.81	24.56	5.17	4.00	5.00
7. Online courses do not give me personal attention.	1.74	6.52	9.57	22.61	18.26	21.30	20.00	4.93	5.00	4.00
8. Online courses do not promote hands-on learning.	3.93	4.37	9.17	21.40	19.21	24.02	17.90	4.91	4.50	4.00
9. Online courses require more work than on-campus classes.	3.03	8.23	5.19	23.38	25.11	21.21	13.85	4.78	6.00	6.00
10. Online courses don't have an instructor hounding me to stay on task.	1.73	6.93	14.29	24.68	21.65	19.91	10.82	4.61	4.00	4.00
11. Online courses require more time than on-campus classes.	3.90	11.69	9.52	22.08	22.94	15.15	14.72	4.53	7.00	7.00
12. Online courses give me more freedom, perhaps, more than I can handle.	4.76	11.69	11.69	22.08	21.65	18.18	9.96	4.39	4.00	4.00
13. Online courses provide limited and delayed feedback.	5.22	12.17	14.78	22.17	20.87	14.78	10.00	4.26	3.50	4.00
14. Online courses increase plagiarism/cheating.	6.55	12.66	9.17	32.75	16.16	12.66	10.04	4.17	5.00	6.00
15. Online courses make me lazy.	8.66	15.58	10.39	18.61	25.11	12.55	9.09	4.10	6.00	7.00
16. I do not like having to meet deadlines for submitting tasks.	9.61	24.02	16.16	27.51	10.04	8.73	3.93	3.46	5.00	7.00

Note. SD = Strongly Disagree D = Disagree SD = Somewhat Disagree N = Neutral SA = Somewhat Agree A = Agree SA = Strongly Agree

The findings highlight the importance of a reliable internet connection for success in online courses. Access to a reliable internet connection is essential for online learning, as it enables students to access course materials, participate in online discussions, communicate with instructors and classmates, and submit assignments. Without a stable internet connection, students may face difficulties keeping up with coursework and engaging in the learning process, which could negatively impact their performance and overall learning experience.

This highlights the digital divide issue – the gap between those with access to reliable internet and technology and those without access. The digital divide can create disparities in educational opportunities and outcomes, as individuals without reliable internet access may be disadvantaged regarding online learning. This can limit their ability to acquire new skills and knowledge, potentially hindering their educational and career prospects.

Good time-management skills were crucial for online courses' success. In an online learning environment, students have more control over their schedules, but they also must be more self-directed and disciplined to stay on track with coursework. This can be challenging for some students, especially those learning new skills or struggling with time management. Good time-management skills can help students prioritize their coursework, avoid procrastination, and meet deadlines, all essential for success in online courses.

The findings also echoed the previous potential downsides of online courses, such as social isolation and a lack of personal interaction with peers. The online environment can be lonely for some students, who may miss the face-to-face interaction and sense of community they would have in a traditional, in-person classroom. This can be particularly challenging for introverted students who struggle with loneliness. However, students can counteract these feelings by connecting with their peers and instructors through discussion forums, group projects, or virtual study groups. As described in the CoI model, a solid social presence is critical for fostering a sense of community and facilitating meaningful interactions among students.

While online courses offered several benefits, they also came with challenges. The findings highlight the importance of a reliable internet connection for success in online courses and underscore the need to address the digital divide in the real world. To succeed in online learning, students must prepare themselves to have a reliable internet connection, good time-management skills, and proactively overcome the sense of isolation that sometimes accompanies it. Students can have a positive and successful online learning experience by being aware of and overcoming these challenges.

The Qualities and Characteristics Required for Online Learning

The survey included a Likert scale inventory of ten (10) potential student characteristics required for success in online learning. Most respondents considered time management skills,

61.74%, independence and responsibility, 58.26%, and self-motivation, 58.08%, essential for online learning success. Other vital qualities included being technologically prepared, having a good work ethic, and personal commitment. The least essential qualities were having academic readiness and being an effective communicator, as presented in Table 6.

Table 6

The Qualities and Characteristics Required for Online Learning

N = 230

<i>Criteria</i>	<i>%</i>							<i>Mean</i>	<i>Median</i>	<i>Mode</i>
	<i>SD</i>	<i>D</i>	<i>SD</i>	<i>N</i>	<i>SA</i>	<i>A</i>	<i>SA</i>			
1. Time management skills	0.00	0.00	0.87	3.04	7.83	26.52	61.74	6.45	6.00	7.00
2. Independent and responsible	0.00	0.43	0.87	2.61	8.70	29.13	58.26	6.40	7.00	7.00
3. Self-motivated	0.00	0.44	0.44	3.49	8.30	29.26	58.08	6.40	7.00	7.00
4. Technologically prepared	0.00	0.88	1.32	3.96	11.89	32.60	49.34	6.22	6.00	7.00
5. Good work ethic	0.00	1.30	0.43	5.22	8.70	38.26	46.09	6.20	7.00	7.00
6. Personal commitment	0.00	0.44	1.32	5.73	10.57	40.09	41.85	6.14	6.00	6.00
7. Computer literate	0.00	0.44	1.76	5.29	14.98	33.92	43.61	6.11	6.00	7.00
8. Goal-oriented	0.00	0.44	0.87	7.42	18.78	33.62	38.86	6.01	6.00	7.00
9. Academic Readiness	0.00	1.76	1.32	7.93	17.18	35.24	36.56	5.93	6.00	7.00
10. Effective communicator	2.20	5.73	3.52	11.45	22.47	29.07	25.55	5.36	6.00	7.00

Note. SD = Strongly Disagree D = Disagree SD = Somewhat Disagree N = Neutral SA = Somewhat Agree A = Agree SA = Strongly Agree

The findings suggested that good time management, independence, and self-motivation are crucial for success in online learning. Good time management helps students prioritize their tasks, allocate their time effectively, and complete their assignments on time. Conversely, self-motivation drives students to set goals, work towards them, and overcome challenges. Independence and responsibility emphasize the importance of self-discipline and ownership of one's learning process. These skills are also essential workplace skills in today's professional environment.

Good time management is a critical skill in the workplace, as it helps employees prioritize tasks, allocate their time effectively, and meet deadlines. In a fast-paced work environment with

multiple competing demands, managing time efficiently can increase productivity and contribute to an individual's success. Furthermore, self-motivated employees are driven to set goals, work towards them, and overcome challenges. Self-motivated employees are more likely to take the initiative, seek growth opportunities, and demonstrate resilience in the face of obstacles. This can increase job satisfaction, professional development, and career advancement. Employees who are independent and responsible are more likely to take ownership of their tasks, work autonomously, and demonstrate accountability for their performance. This can contribute to a positive work culture, foster trust and collaboration among team members, and lead to improved organizational outcomes. Furthermore, all these skills can be honed and practiced by students preparing for professional careers via coursework.

Additionally, being technologically prepared, having a good work ethic, and having personal commitment were essential for success in an online learning environment. Having a good understanding of technology and using it efficiently helps students navigate the online learning platform and easily access course materials. A good work ethic involves being diligent and dedicated to one's studies. At the same time, personal commitment indicates having a strong desire to succeed and a willingness to put in the effort.

Interestingly, the findings showed that respondents ranked academic readiness and effective communication as the least important qualities for success in online learning. Academic readiness is crucial for setting a solid foundation for learning, and without it, students may struggle to grasp concepts and apply their knowledge effectively. When students undervalue academic readiness, they may underestimate the importance of having the necessary knowledge and skills to succeed in a particular course or program. This can result in students being unprepared for the academic rigor and challenges of the coursework, leading to difficulties in keeping up with the material and potentially impacting their performance and learning outcomes.

Similarly, when students undervalue effective communication skills, they may need to concentrate more on collaborating with their classmates, comprehending course content, and expressing their ideas clearly. Effective communication is crucial for engaging in discussions, seeking clarification, and working on group projects in an online learning environment. Students may experience misunderstandings, misinterpretations, and difficulties building relationships with their peers and instructors without effective communication skills. This can lead to a further sense of isolation and hinder their ability to participate fully in the learning experience.

Overall, the findings suggest that the skills crucial for success in online learning, good time management, independence, and self-motivation, are also essential in the workplace. By cultivating these skills through online learning, individuals can enhance their workplace readiness and better prepare themselves for the demands of today's professional environment. Employers, too, can benefit from employees who possess these skills, as they can contribute to increased productivity, a positive work culture, and improved organizational performance. In addition, undervaluing academic readiness and effective communication can affect students'

success in online learning. Students need to recognize the significance of these qualities and strive to develop them to engage in the learning process and achieve their academic goals.

Best and Worst Practices in Online Education

We gave survey participants five (5) open-response subjective questions about their perceptions of the best and worst practices in online education. While these open-response questions sometimes provided fascinating insights, this study concerns the results of the objective inquiry responses.

Results and Implications

To guide improvement, it is crucial to identify what students indicate does not encourage a positive online learning environment. An initial examination of worst online course practices identified several student-perceived deficiencies. First, students identified that they found full-course deployment (including all chapters and assignments) on the first day to be discouraging. Specifically, students indicated that this method was overwhelming and felt they were to "fend for themselves" and self-guide the material. While many students like to work ahead, especially in online courses, this finding is eye-opening in that too much at once can engulf students and leave them feeling defeated from the beginning. This couples with an additional recurring theme from the results: online students are prone to work overload and burnout. As educators, one must balance the necessary work and presentation in a goal-oriented and achievable way in students' eyes. To guide students through the learning process, course content must be organized so that all items are easy to locate and navigate.

Second, interpersonal skill rhetoric becomes increasingly difficult in an online environment. Namely, teamwork, where individual grades are dependent on commitment and participation from all group members, was frowned upon by students. This may be due to the physical distance between peers, making it more challenging to connect and rely on others to "pull their weight" when individual grades are at stake. Regardless, the disapproval of team projects is interesting, as evident from the initial responses. Educators and course facilitators can improve team conditions by integrating benchmark goals throughout the semester and implementing a peer evaluation component to combat this pushback.

Third, a recurring theme of excitement and commitment from the professor emerged. Students identified that the professor's lack of clear instructions and communication and slow response time to address questions or concerns was daunting. Students mentioned that they craved face-to-face interaction with their instructor, even in an online course, either through video conferencing, virtual meetings, or at a minimum, individually recorded course materials. It is encouraging that students identify the professor/student relationship as an essential factor in their course success. Educators must embrace and cultivate that relationship as much as possible through digital connections.

The data suggest some silver linings balance out the negative. Students recognize that online courses require a substantial amount of work. Successful students embody qualities including excellent time management skills and being independent and responsible. Surprisingly, an overwhelming majority of students said that they would retake an online class—even those with less than stellar prior experiences—due to the flexibility in scheduling.

Student responses did include suggestions for improving online courses. First, students identified that they value a learning model focused on learning and retaining, not just "getting the question right." This goal is undoubtedly attainable through precise course organization and structure, real-world topical knowledge application, and clear feedback on work. Students also suggested that interactive activities would mend this gap between students and professor(s).

Finally, one area for online course improvement involves cultivating supportive communication between professors and students. As suggested by students, one way to improve communication is to structure required "check-ins" with the professor into the class schedule. A delicate balance must be struck between establishing clear expectations and due dates while maintaining flexibility and understanding when technical issues occur, as they often do in the online learning environment.

Conclusions

We based the following conclusions on the study findings:

1. Online courses hold significant potential for enhancing accessibility, inclusivity, and skill development while fostering self-discipline. While online courses offer many benefits, it is necessary to recognize and address the limitations regarding social interaction and connection.
2. Online courses come with challenges, including needing reliable internet, good time-management skills, and addressing the potential sense of isolation.
3. Students recognize the importance of time management, independence, self-motivation, technological preparedness, work ethic, and commitment to succeed in online learning.
4. Students found full-course deployment on the first day discouraging, disliked teamwork with grades dependent on group participation, and found unclear instructions and slow response time from professors daunting.

Recommendations

We make the following recommendations based on the conclusions:

1. As business educators, leveraging the potential of online courses while addressing social interaction and connection limitations is crucial. To foster a sense of community and collaboration, provide opportunities for students to connect and

- collaborate using online discussion forums, virtual group projects, and video conferencing tools. Enhance course content by incorporating real-world scenarios through case studies, simulations, and problem-based learning activities to develop critical business skills. Promote self-discipline by offering resources and strategies for effective time management, goal setting, and self-reflection. Ensure accessibility and inclusivity by providing support and resources to students who may face barriers to online learning, including access to technology, accommodations for disabilities, and academic support services. By implementing these strategies, business educators can create an engaging and inclusive online learning experience that prepares students for success in the online and business worlds.
2. Increase efforts to bridge the digital divide and access to reliable internet and technology by expanding broadband infrastructure to underserved areas, providing affordable internet options for low-income households, and offering access to technology resources at public facilities such as libraries and community centers. Address online course challenges by offering time-management guidance and fostering a sense of community through online interaction opportunities.
 3. To support online student success, it is important to provide clear guidelines and technology resources that promote independence, self-motivation, and a strong work ethic. Instructors can use structured assignments and feedback to reinforce these qualities and help students stay on track. Before enrolling in a course or program, institutions should implement pre-assessment tools to gauge students' prior knowledge and skills. This can help identify areas where additional support or resources may be needed to prepare them for the coursework. Furthermore, incorporate activities and assignments that focus on developing communication skills, such as group projects, presentations, and peer feedback, to help students practice and improve their communication skills. By implementing these strategies, educators can create a supportive learning environment that fosters student success.
 4. Address student concerns by staggering course material releases, reevaluating graded teamwork, providing clear instructions, and responding to student inquiries in a timely manner.

Limitations and Implications for Business Education Classrooms

This study has the following limitation that should be noted: The respondent sample overrepresented White and traditionally aged college students (17-29 years of age). Therefore, data were broadly generalizable to the studied College of Business students. However, when considering specific populations of students, these results most directly reflect the experiences of undergraduate students with prior online course experiences and traditionally aged college students due to their overrepresentation in the respondent sample.

Online teaching and education in business programs is not a new or novel concept. While many AACSB-accredited programs continue their commitment to traditional, on-campus degree

programs, new programs, and continued course offerings are still prevalent online. In other words, online learning is here to stay, even as we lighten COVID-19 restrictions.

So, what else can educators do to ensure quality programming and curriculum while presenting course materials in an engaging, inclusive format for students? Identifying best practices directly from students forced into this COVID-19 modality is a good start, even if online learning was not their initial preference. This study may help educators identify the path forward for online education, specifically by identifying benefits, advantages, problems, and challenges associated with online learning.

In conclusion, the study examines online learning in business education, identifying benefits such as accessibility, skill development, and challenges, including limited social interaction and internet access. Students emphasized success factors like self-motivation and time management but expressed concerns about content deployment and graded teamwork. The study acknowledges a sample limitation and underscores the importance of identifying best practices for online business education based on student experiences.

Recommendations for Future Research

Based on the limitations of this research, future research should include the following:

1. Conduct a study with a more diverse sample, including individuals from underrepresented racial and ethnic groups. Researchers should try recruiting participants from diverse racial and ethnic backgrounds to better understand how the experiences of these students may differ from those of White students based on the findings.
2. Include non-traditional students (30 years or older) in the study to understand how their experiences and perceptions of online courses differ from those of traditionally aged college students. Non-traditional students often have different life circumstances, such as work and family responsibilities, that may impact their experiences in online courses.
3. Conduct a comparative analysis of the experiences of traditional and non-traditional students and students from different racial and ethnic backgrounds. This could involve comparing survey or interview responses across other demographic groups to identify any unique challenges, preferences, or benefits of online course experiences.
4. Perform longitudinal studies that track the experiences and outcomes of diverse students over multiple semesters or years. This can provide insights into how students' experiences in online courses change over time and how different student populations may have different trajectories of success in online courses.
5. Design studies that specifically focus on the experiences of specific populations, such as first-generation college students, international students, or students with disabilities. These studies can provide in-depth insights into these groups' unique challenges and strengths in the context of online education.

6. Examine how students' experiences in online courses vary across different institutions, including community colleges, historically black colleges and universities, and other minority-serving institutions. This can reveal how institutional contexts and resources influence the experiences of diverse students.

In conclusion, this study identifies the benefits and challenges of online education in business programs. The findings emphasize the potential of online courses for accessibility, skill development, and self-discipline while acknowledging limitations in social interaction and internet access. Students' success in online learning relies on self-motivation and time management, although concerns arise regarding content deployment and graded teamwork. Recommendations include fostering community and collaboration, addressing the digital divide, promoting independence and self-motivation, and addressing student concerns. Future research should involve a more diverse sample, explore non-traditional student experiences, compare different demographic groups, conduct longitudinal studies, and examine specific populations. Overall, this study contributes to understanding online education in business and offers insights for creating engaging and inclusive online learning experiences.

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Appendix A: COVID-19 Response Survey

What is your age?

Which gender do you most identify with?

What is your country of origin?

What is your primary race/ethnicity?

Total years of education? (e.g., 12 years = HS Diploma; 16 years = Bachelor's Degree)

Current Grade Level Status (Freshman, Sophomore, Junior, Senior, Graduate Student)

Experience with Computers (Very Limited to Very Proficient; 7-point Likert)

Have you taken an online course before? (Yes/No)

Questions Related to the Advantages of Online Learning

What are the benefits of an online class? (Options ranging from 1 – Strongly Disagree to 7 – Strongly Agree)

Online courses are convenient.

Online courses allow me to work at my own pace.

Online courses offer flexibility.

Online courses give me access to a huge amount of knowledge

Online courses bring education right to my home.

Online courses increase independence in learning.

Online courses offer more individual attention.

Online courses help me meet interesting people.

Online courses give me real-world skills.

Online courses promote life-long learning.

Online courses have financial benefits.

Online courses teach me to be self-disciplined.

Online courses help me in promoting online research and resources.

Online courses connect me to the global village

Online courses provide updated and authentic information

Questions Related to the Problems/Challenges You Have Faced

What are the challenges associated with online education (teaching/learning)?

Online courses require more time than on-campus classes.

Online courses require more work than on-campus classes.

Online courses require good time-management skills.

Online courses may create a sense of social isolation.

Online courses do not give me personal attention.

Online courses make me lazy.

Online courses don't have an instructor hounding me to stay on task.

Online courses give me more freedom, perhaps, more than I can handle.

Online courses require that I must find my path to learning.

Online courses provide limited and delayed feedback.
Online courses require reliable internet at home.
Online courses increase plagiarism/cheating.
I do not like having to meet deadlines for submitting tasks.
Online courses do not promote hands-on learning.
I miss the personal interaction with my fellow students.
Online Courses are only effective in certain subjects.

Questions Related to the Characteristics Required for Online Education:

I believe the following qualities/characteristics are required for online education:

Good work ethic
Time management skills
Independent and responsible
Goal-oriented
Self-motivated
Effective communicator
Personal commitment
Computer literate
Academic Readiness
Technologically prepared

Questions Related to Future Strategies and Recommendations:

Would you take an online course in the future? Why or why not?
What advice would you give to instructors who are planning on setting up and teaching an online course?
What suggestions would you make to the policymakers/course designers regarding online education practices in education?
Does online education need integration of face-to-face interaction for more effective implementation and results? Explain.
What are the things you like best about online learning?
What are the worst practices you've seen in an online course set-up?