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Teaching a Hybrid Mathematics Course During a Pandemic: Insights from a Community College Math Instructor

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Abstract

As a result of the COVID-19 pandemic, hybrid learning environments went from scarce offerings on some post-secondary campuses to a pervasive presence across most campuses. In some instances, hybrid courses were implemented in haste with minimal planning by educators and a lack of essential training and support for instructors. This action research study documents an instructor's insights gained from implementing a hybrid modality algebra course at a community college in the southwestern United States during a pandemic in the 2020-2021 academic year.

Keywords: hybrid learning, best practices, mathematics, higher education, COVID-19, professional development, self-efficacy

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TEACHING A HYBRID MATHEMATICS COURSE DURING A PANDEMIC

The COVID-19 pandemic exposed many educators and students to various remote learning formats. One format introduced was the hybrid course, which provides both in-person and online instruction. Premised on the perceived benefits of having the best of both worlds, hybrid courses include face-to-face personal interactions with the convenience and flexibility of online components. Hybrid instruction has been increasing in popularity and gaining attention as a cost-effective option that can yield equal or better outcomes for student success as face-to-face instruction (Xu & Xu, 2019). The purpose of the present study was to use action research to gain insights from an instructor regarding the transition to the hybrid learning environment during a pandemic. Students' reflections on the in-person component as well as informal discussions informed the instructor's reflections. Findings concerning practices that were most salient can serve as a timely and relevant contribution to hybrid learning research.

Hybrid Course Structures

Because of the COVID-19 pandemic, colleges were forced to switch nearly all of their courses to a remote format during the Spring 2020 semester. Operating in a triage mode, colleges made decisions to provide upcoming courses in a manner different than had historically been offered. A summer 2020 survey indicated that the majority of U.S. institutions of higher education were planning to offer courses in a hybrid format (Martel, 2020). These forced changes were occurring even though there had been a scarceness of research on hybrid and blended learning formats at the time, as noted by Singh et al. (2021).

The definition of hybrid courses varies greatly across institutions, as well as within the literature, regarding synchronous and asynchronous formats, the proportion of class time that will be spent face-to-face versus online, and what each component looks like in practice (Lamport & Hill, 2012). Variations also exist regarding the level of integration of and complementary nature of the in-class and online experience (Hrastinski, 2008). For example, Raes et al.'s (2020) review of hybrid courses focused entirely on synchronous formats with one group being on campus while another group simultaneously followed the course from their location of choice. In the present study, the hybrid format was not synchronous. Instead, the format was consistent with one of Stanford Teaching Common's (n.d.) definitions of hybrid courses where students met at regularly scheduled sessions throughout the term and worked asynchronously for the other portion of the course. However, the present study was not the typical format in that all students could not meet in person at one time due to social distancing requirements.

In Porter et al.'s (2014) study, only seven of the 11 postsecondary institutions that had implemented a hybrid learning design provided guidelines for the percentage of instruction that was delivered online, with most reporting the online learning component to be around 50%. The remaining institutions had a much broader range such as up to 50% and between 50% and 99%. Graham (2006) cautioned against using the broadest definitions of blended learning that simply included *some* element of combined instructional methods or media because those definitions could include essentially any course that includes the utilization of a learning management system (LMS).

Singh et al. (2021) noted several strengths and weaknesses of hybrid and blended learning models. As noted by Singh et al. (2021), "students are more aware of self-efficacy, self-

awareness, self-paced learning, creating a flexible learning environment, and allowing for an interactive and safe way to learn digitally" (p. 155). Hybrid learning environments should be structured with the assurance that experiences in both the online and in-person environments have been thoughtfully chosen and integrated in ways that improve the quality or outcomes of the course (Hrastinski, 2018).

The inclusion of an in-person component can soothe potential anxieties that students might have regarding being an online learner (Oh & Park, 2009). In a hybrid-delivery format, student anxiety levels can be alleviated by the manner in which the in-person component provides opportunities for the instructor to orient students to the course expectations, clarify course requirements, help students troubleshoot technology issues, and build community among the students (Martyn, 2003). Instructors need to build their course to include collaborations that will decrease student isolation, a structure that creates a cognitive presence, and a thorough online orientation (Singh et al., 2021). The structure of the hybrid/blended course needs to be interactive. If the online portion is not interactive, all parties involved could become complacent (Singh et al., 2021). Effective pedagogy is also important (O'Byrne & Pytash, 2015). Instructors need to determine how to gauge students' interest in the course and recording of videos or Zoom meetings are encouraged (Singh et al., 2021).

A successful remote course offering should incorporate activities and include a course structure that promotes attendance and engagement (Neuwirth et al., 2020). The most successful hybrid course structures include challenging and engaging online activities that complement face-to-face activities (McGee & Reis, 2012). In their synthesis of best practices, McGee and Reis (2012) noted the recurring recommendation to establish clear course objectives *before* coming up with activities, assignments, and assessments. Directly translating existing course schedules, activities, and discussions into an online format, or even holding frequent synchronous meetings in an effort to replicate face-to-face learning, may not work for a number of reasons (Achen & Rutledge, 2023; McGee & Reis, 2012). For example, the timing of an activity may not naturally land on the calendar to the modality it is best suited for (i.e., an activity best suited for in-person learning may land on an online/independent day).

Discussions are a valued component in both the online and in-person aspects of a hybrid course (Martyn, 2003; McDonald, 2013; McGee & Reis, 2012). Martyn (2003) found that students enrolled in a hybrid course consistently reported positive perceptions of online discussions as they related to their learning, grade, course quality, and participation in the course. The online component does not have time limits that occur during in-class discussions; thus, mandatory participation in online discussions can result in increasing the number of students who can engage in the discourse (Shea et al., 2015). Regarding discussion goals, McGee and Reis (2012) recommended that online discussions be more discursive and less outcome oriented, and that those online discussions be leveraged in face-to-face sessions to clarify and apply the learning that took place in the online thread. Because time management was cited as a common struggle in the online environment (McDonald, 2013), something as simple as staggered due dates for postings and responses can aid in supporting students by alleviating the frustration of waiting for their classmates to post or respond in order for them to meet the response requirements (Shea et al., 2015). Instructors' prompt feedback and intentional weaving of observations from the online discussion space into face-to-face instructional discourse is important (McGee & Reis, 2012). For example, insights observed by the instructor in the online

environment could be elaborated on in the in-person sessions just as common misconceptions or points that need clarity could be addressed face-to-face.

For hybrid courses, institutions should provide instructors with adequate planning time and technological and pedagogical support (Lamport & Hill, 2012; Porter et al., 2014; Rasheed et al., 2020). In a review of challenges related to implementing hybrid courses, Rasheed et al. (2020) found a shared frustration among instructors concerning the lack of time they had to create materials and learn the necessary online platforms. Rasheed et al. (2020) posited that technological illiteracy and incompetency led to other synthesized technology-specific challenges (e.g., online video creation challenges and technology operation challenges) and that these challenges all could be mitigated with proper time and training. Researchers have asserted that training, allowing ample time to modify courses, and taking the time to guide students in navigating the new format, are challenges that warrant attention in order to facilitate the successful implementation of hybrid courses (Ealy, 2013; Lamport & Hill, 2012). Additionally, Achen and Rutledge (2023) found colleague mentorship to be an impactful way to extend technological and pedagogical development beyond formal training sessions.

Because technology needs are important for both instructors and students, measures need to be taken to address the digital divide (Singh et al., 2021). In the online environment, a reliable technology platform needs to be chosen to deliver, supplement, or organize instructional course content. If a technology platform is unreliable or overly complex, it can become a barrier as more time is spent troubleshooting than learning, which can result in a negative perception of hybrid learning and teaching (Brown, 2016).

Student Outcomes

Findings regarding student outcomes by course modalities have been mixed. In comparing success rates of students enrolled in hybrid courses compared to those enrolled in face-to-face courses, the majority of studies indicated that students in hybrid courses performed the same or better across the two modalities (e.g., Chingos et al., 2017; Moskal, 2017; Xu & Jaggars, 2011). However, in a study of developmental mathematics students enrolled in three delivery formats (face-to-face, hybrid, and fully online), Ashby et al. (2011) found that students in the hybrid course had lower assessment scores during the course, but final pass rates were not statistically significantly different across the three modalities. After removing non-completers (i.e., students who did not take the final exam), the hybrid courses no longer had the lowest average test scores and there was no statistically significant difference in final exam scores across the three modalities. In this new sample that accounted for attrition, the face-to-face courses actually had statistically significant lower course averages than the other two course-types. As highlighted by Ashby et al. (2011), factors such as attrition can vary across modalities, and reasons for attrition are complex and not fully known.

Findings are mixed regarding the effect of how much time is spent in the online learning environment as opposed to face-to-face, but Lamport and Hill (2012) emphasized that these mixed findings could be explained by variations in course content and quality of the online platforms. This hypothesis was corroborated by Park et al. (2019) who found that time logged into the online portion of a course was only somewhat correlated to student performance. Students' participation in online practice quizzes did have an effect on course outcomes,

indicating that it is not the amount of time spent online that matters as much as what students are doing while online.

Student Satisfaction

Across modalities, course satisfaction is related to academic and nonacademic outcomes. Price et al. (2016) found that student performance was positively related to course satisfaction across modalities and that students' satisfaction with hybrid courses were higher than those of purely online and face-to-face courses. They concluded that understanding the factors that contributed to student satisfaction in a hybrid learning environment were worthy of investigation.

Interviews with learners in a hybrid course revealed that in-person interactions made students feel more connected and motivated and that faculty presence in both the in-person and online environment was paramount to students' experience and satisfaction (McDonald, 2013). Voegele (2013) reported the importance of peer interactions, comfort with peers, and quality inclass discussions to make for a better, more comfortable online environment. These qualitative findings are consistent with quantitative findings that have found a positive relationship between the social and collaborative nature of a classroom and resulting student satisfaction (Price et al., 2016; Sorden & Munene, 2013).

Social presence is a construct related to course satisfaction (Sorden & Munene, 2013). In addition to social presence and engagement, other nonacademic factors such as sense of belonging, self-efficacy, and motivation have also been shown to affect student outcomes (Fong et al., 2017; Shea & Bidjerano, 2010). The online and in-person delivery formats that become blended in hybrid courses each have varying levels of social engagement opportunities. Shea and Bidjerano (2010) found teaching presence and social presence to be higher in the hybrid modality compared to a fully online format. Francescucci and Rohani (2019) found that students in a face-to-face course had higher levels of engagement than those in a synchronous online-delivery format. In a meta-analysis regarding nonacademic variables in blended learning environments, Van Laer and Elen (2016) summarized the overwhelming theme of how social interaction was positively related to self-regulation, learner control, satisfaction, motivation, and learning, as well as the negative influence that a lack of social interaction had on those same variables, in addition to attrition. Price et al. (2016) found that perceived interaction was highest in traditional face-to-face classes and lowest in online courses, but no differences existed between face-to-face and hybrid courses.

Conversely, some classroom learning experiences in online or hybrid modalities were perceived as negative or frustrating, which may have decreased satisfaction or persistence (Jaggars, 2011). One such frustration cited in Voegele's (2013) study was students' feeling of disconnect regarding the expected active collaboration in the online environment and in-person expectation to be "mute" and listen to a PowerPoint lecture. Additionally, a common frustration among online and hybrid learners is technology that is new and that may require a steep learning curve (Marks, 2013; Rasheed et al., 2020). Students in Marks' (2013) study also reported struggling with understanding the role of teacher and student in the hybrid-learning environment and the anxiety resulting from not feeling fully aware of expectations. Students expressed the importance of teachers giving carefully structured assignments with clear expectations and rubrics to make sure that students knew they were meeting objective goals while on their own. These sentiments were consistent with McGee and Reis' (2012) synthesized findings that clear

instructions and clear connections between online learning and classroom experiences are a critical best practice of hybrid classrooms. Price et al. (2016) corroborated the importance of clear instructions with their finding that course clarity was statistically significantly correlated with satisfaction across modalities, emphasizing the importance of clear expectations and organization regardless of delivery format.

Purpose

The purpose of this action research study was to gain insights from an instructor on transitioning from a face-to-face format to a hybrid learning environment. Action research is a process where educators thoroughly examine problems of practice with an inquiry process with the goal of improving practice (Dana & Yendol-Hoppey, 2008). Instructors assess their practices and then make improvements. As noted by Borko et al. (2007), practitioner researcher requires that the teacher serves as both the practitioner and researcher (i.e., dual role). Furthermore, "Because the practitioner is a researcher and the professional context is the site for inquiry, the boundaries between research and practice of teacher education" (Borko et al., 2007, p. 6).

In this study, self-reflection focused on challenges and insights gained during the transition to the hybrid learning environment during a pandemic. Self-reflection has been recognized as important to growth and overcoming challenges of remote teaching (Bell et al., 2021). The instructor's voice can provide support for instructors who are transitioning to various learning formats. The students' voice was included to help the instructor understand the interplay of the in-person and remote options. The study was guided by the following research questions: Based on instructor's and students' reflections (a) what lessons were learned regarding course content, course structure, and technology use; (b) what instructor practices did and did not work; and (c) did students perceive the in-person component to be a positive contributor on their confidence to succeed?

Methodology

This study was conducted at a community college in the southwestern United States during the 2020-2021 academic year. During the Spring 2020 semester, courses were moved online. With the exception of very few hybrid-lab-requirement courses, courses remained online through Spring 2021. The lead researcher, who also was an instructor, received an exception to conduct two developmental mathematics sections of Intermediate Algebra in hybrid format in both Fall 2020 and Spring 2021, which totaled 86 students. Intermediate Algebra is the gateway developmental math course before entering College Algebra. The hybrid course structure was such that students would attend class in person once per week, with the remainder of the coursework completed asynchronously. In order to maintain the campus' six-foot social distancing requirements, half of the students attended class in person on Monday, and the other half attended in person on Wednesday.

At the end of the semester, students were invited to complete an anonymous survey about their experience in the hybrid mathematics course. The three questions asked students the degree to which they agreed or disagreed with the (a) in-person component of the class positively contributing to their confidence to succeed in the course, (b) peer-to-peer interactions positively contributing to their confidence to succeed in the course, and (c) instructor interactions positively contributing to their confidence to succeed in the course. These seven-point Likert questions ranged from one (strongly disagree) to seven (strongly agree). Students had a required free response section to elaborate on why they responded with the value they chose.

Results and Discussion

The results and discussion are divided into three sections. The first section includes insights gained from the instructor regarding course design and best practices. The remaining sections include reflections from the instructor as well as students' reflections and perceptions of how various hybrid components affected their confidence to succeed.

Instructor Insights Gained During Transition

Insights acquired throughout the transition to hybrid courses were from the instructor's own experiences and student feedback. Lessons learned from the first semester informed adjustments in the second semester. Information that follows relate to the pedagogical and logistical lessons that the instructor used to transition to hybrid.

Course Content and Structure

The instructor found that there were many challenges to creating a split-hybrid class meeting model where half of the class met on Monday and half of the students met on Wednesday. A split-model course might not be the typical hybrid format but was necessary to meet the six-foot distancing requirement at the time. Even with careful consideration of content planning (Hrastinski, 2018; McGee & Reis, 2012), challenges still existed. Initially, when transitioning the course curriculum from an in-person to a hybrid format, the instructor examined a previous semester's weekly course outline of topics and determined the topics that would be best suited for in-person and online. The final determination regarding which material would be taught in the different learning environments was often based on identifying objectives that tended to be the most difficult for students to learn in prior semesters. The instructor then strived to teach those difficult objectives in person. One challenge that emerged in the split-hybrid class model was that teaching in this format made it difficult to keep students on the same schedule. Some students learned the in-person material at the start of the week, while other students engaged in the online topics prior to coming to their in-person day that week.

The instructor gained valuable information about engagement and discourse. Engagement in the staggered in-person and asynchronous meeting formats lead to inconsistencies between questions the instructor anticipated and the questions that were asked. Some students interacted with the material in the asynchronous environment prior to the in-person class meeting while others waited until after the class. Thus, a problem the instructor encountered was creating a challenging and engaging in-person discourse. After reflecting on the transition, the instructor decided that in future non-COVID semesters, a more seamless structure would be that all students meet in person on the same day so that the timeline of students' engagement during the week was more predictable.

Technology Usage

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Technology utilization proved to be paramount in the implementation of the hybrid courses. The instructor previously had taught this course and was comfortable using the campus LMS Canvas, as well as the supplemental online program associated with the recommended text (i.e., MyLabs Plus). However, the instructor had never taught online before and had to learn how to use the course resources as a means of delivery rather than as a supplement to the course. Thus, there was a learning curve (Rasheed et al., 2020). The online portion of the course was primarily taught with videos and slide presentations. Initially, existing open-resource videos found on the web were used to teach many concepts in the online component. Students were quick to provide feedback to the instructor about the perceived downfalls of using non-instructor made videos concerning certain notational or vocabulary differences and nuances unique to the videos. Students preferred video lessons came from the instructor. Based on this concern and in the best interest of the students, the instructor quickly responded by creating her own videos. The instructor also learned that creating high-quality videos in a short time frame was timeconsuming and added considerably to the workload. Regardless, students immediately expressed their gratitude. These experiences were consistent with the existing research regarding the challenges of implementing a hybrid learning design (Porter et al., 2014; Rasheed et al., 2020) and reinforce the need for institutional support for adequate planning time prior to the start of the semester.

Learning Checkpoints

The instructor learned that creating and utilizing ungraded checkpoints was beneficial when teaching hybrid mathematics courses. Part of the way through the first semester, it became clear that students potentially were going through the online lessons and videos without having obtained the intended exit skills. In-person sessions provided opportunities for students to work through problems during and immediately after being introduced to topics, which also gave the instructor the opportunity to gauge learning. In an effort to mimic this engagement, the researcher created ungraded Canvas quizzes that students were prompted to complete after going through the online lessons. Some of these quizzes were multiple choice, and some were short answer, but all of them were instantly graded in the LMS with correct answers and work shown as to how to get that correct answer. Not counting the grades in the gradebook made it a low-stakes way for students to test their knowledge to see what mistakes they made and helped students learn from those errors before moving on to any required and graded assignments.

Instructor Reflections Post-COVID

Informing future practices will require that voices are heard. Thus, we now focus on reflections at the conclusion of the COVID transition to a hybrid classroom to determine what did and did not work. One realization pertains to building the workweek around the first day of in-person learning. Ideally, having the in-person day at the start of the week (i.e., Monday for Mon/Wed classes) seemed to be best, which allows the students to operate on a typical Monday through Sunday schedule. On the first in-person day, the instructor can orient students as to what is coming up that week, help them troubleshoot technology, and set expectations for the assignments on that week's calendar. If the in-person day needs to meet later in the week, one

might consider changing the traditional work week of Monday through Sunday to perhaps Thursday through Wednesday.

Because discussions are valuable (e.g., Martyn, 2003; McDonald, 2013; McGee & Reis, 2012), the participating instructor reflected on the benefit of high-quality online discussions and acknowledged there were some missed opportunities that could have held students accountable for the online learning content. In retrospect, this instructor could have utilized online discussions to get students to think more meaningfully about the online content and engage in content-related conversations with their peers. Online discussions could have helped keep students on track with online content (i.e., time-management), an often-cited struggle for students (McDonald, 2013). Paced online discussions could have helped students understand expectations regarding the amount of intended time allowed for topics, thus aiding students at creating a plan that leads to success.

A final issue observed by the instructor was that some students would wait until the quiz due date to complete all of the unit work (i.e., Sunday). To address this concern, the instructor began creating mandatory assignments due on Thursdays and optional assignments due on Wednesdays or Fridays, which resulted in more students being engaged with the content earlier in the week. Even though some assignments were optional, the due date appearing on the calendar reminded students that they were supposed to be working on the material throughout the week and communicated the pacing that the instructor expected them to be on. Using the LMS assignment calendar in this manner paced students, supported their learning and time management, and aided in students having adequate time to process their learning and identify their mathematical mistakes prior to any quizzes being due.

Student Reflections: Confidence to Succeed

At the conclusion of each semester, students were asked to complete a reflection survey about the in-person component of the course as it related to their confidence. The purpose of this was to help the instructor understand the value of the in-person meeting. Of the 73 students invited, 70 participated. Students believed the in-person meetings, peer-to-peer interactions, and peer-to-instructor interactions were important contributors to their confidence to succeed (see Table 1). Instructor-to-peer interactions had the highest mean score, but ratings were high for all three contributors. Students' high ratings on these components support Shea and Bidjerano's (2010) finding that a relationship exists between instructor presence/interactions and students' self-efficacy.

Table 1

Descriptives for In-Person Component Contributions to Students' Confidence in Their Ability to Succeed in the Course

In-Person Element	М	Mdn	SD
General In-Person Component	6.46	7.00	1.06
Peer-to-Peer Interactions	5.50	5.50	1.82
Peer-to-Instructor Interactions	6.61	7.00	0.80

Note. n = 70; Likert scale from 1 to 7.

From the free-response question, the importance of the in-person component on students' confidence became apparent. Students reported that confidence with the content increased because they could ask questions, and the instructor could provide clarification of and elaboration on the mathematical content in the in-person meetings. One student shared that "in the classroom, questions are more readily asked because the intimacy of the environment allows it...It enhances the intuitiveness of the instructor to student needs and the learning becomes more effective." Students also remarked on how the in-person component allowed them to feel more confident with their graphing calculator software and LMS systems. Comments such as "having the once a week session helped me stay focused and on track. I would have given up if it were fully online" and "being able to get help in real-time and not have to wait for an electronic response was key in me not falling behind" provide insight into the ways the in-person element helped students feel like they were capable of being successful.

Several insights emerged regarding instructor interactions. In-person interactions with the instructor made students feel more comfortable asking questions in class and also increased their comfort to e-mail questions if working asynchronously. Students also commented on how the inperson class meetings allowed the instructor to delve deeper into the content and to tailor the content to students' needs by being able to "choose the most important topics to go over in person, thus making everything that was on our own easier." A final insight concerning the instructor-peer interactions impact on students' confidence is the general connection and rapport that was built with the instructor, making students feel more invested in their learning, wanting to attend class, and wanting to push themselves to succeed. One student said "…instructor-to-peer interaction increases student involvement, allowed us to create a connection with the teacher, and made an incentive for the students to impress and confide in her."

With regard to students' comments for peer-to-peer interactions impact on their confidence, several insights emerged. One insight was the recurring comment of the benefit of having someone to collaborate with when the instructor was busy working with another student. One student shared "it was good to be able to ask a classmate for help and know they could work with you or even just check your work with them." A second insight was students' appreciation for simply making a friend and having someone to text when they had a question outside of class. A final insight was peer-to-peer interactions positively contributing to confidence.

Interacting with peers was a source of motivation and accountability. Students knew they would be asked to work with classmates, and that motivated them to stay on task and current with the material so that they could contribute to those conversations. One student summarized their experience to say "When a student can see how another student is working through a problem in real-time, it creates emotional memories. This collective learning environment simply cannot be duplicated in a fully virtual environment."

A final aspect of the student reflection survey concerned elements of the course design that were most or least helpful. The most frequently reported negative component of the hybrid experience mentioned by students was that they had to learn anything online at all; students indicated a preference for being fully in person. A few students mentioned that it was difficult to use the equation editor and picture upload portion of quizzes housed in the LMS system and expressed a need for more instruction on that component while in class. This is something that can be easily addressed in future semesters. However, positive elements that were reported included the instructor made videos, multiple attempts in the MyLabs Plus learning platform, and the graphing calculator software, along with instructor created guides.

Limitations and Future Research

Limitations in research should be noted. This study was limited to one instructor's reflections. However, given that the purpose was to conduct an action research study, we believe hearing these reflections from an experienced instructor is important. Because of COVID-19 distance requirements, classrooms in institutions of higher education were forced into remote learning environments. These virtual learning experiences opens a new line of research regarding preferences of course format from both the instructors' and students' perspectives. Future research could also examine the role time management strategies play in the remote learning experiences (McDonald, 2013) and extend this research to examine time management skills and preference for learning in an online format in the peri-post pandemic educational system.

Conclusion and Implications

During the COVID-19 pandemic, many instructors were thrust into teaching in a remote course modality with no formal training, and some instructors were forced to transition to a modality that they did not desire to use. These various modalities are likely to remain an option for students, particularly now that many students have indicated a preference for remote options. In fact, Bentrim et al. (2022) found that fully in-person classes were students' least preferred modality. Therefore, finding and sharing ways to best utilize the two learning environments in a hybrid format and maximize student experience and accountability in each will continue to be a timely and important area of interest. This instructor's reflections can help provide insights as to which of the hybrid learning elements were most salient in the classroom. For hybrid courses, students believed the in-person meeting time in the classroom helped build their confidence to succeed and were important opportunities to interact with their peers and the instructor. Students also preferred that videos were produced by their instructor. From the instructor's reflections, accountability measures need to be in place to gauge learning and to ensure that students are engaged in the online components and completing the assignments in a timely manner. Furthermore, instructors need to be intentional when planning which activities will occur in the face-to-face versus online environment and adjust the calendars so that each learning activity

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falls in the environment that is most conducive to learning. The instructor found that meeting all of her students in-person during the first half of the week was more beneficial than the latter part of the week and that thoughtful replanning would need to occur if the format was switched. Emergency changes were sustainable but can always be improved upon. Colleges and practitioners can use insights from this instructor to contribute to their conversations about hybrid course offerings. Information gathered from this instructor's experiences can help administrators understand the complexities of transferring to a hybrid format, the workload incurred by instructors during the pandemic, and the resiliency of instructors who continued to provide quality education.

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