

A quantitative Study on Instructors' perspectives about teaching modalities in the classroom for a graduate hybrid Program

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Keywords

Teaching modalities, Instructor perspectives, Classroom instruction, Pedagogical practices, educational technology, Technology integration, educational innovation, Faculty development

Abstract

This research article delves into the multifaceted domain of teaching modalities, exploring the diverse perspectives of instructors within the contemporary classroom environment in a graduate hybrid program, which offers classes online with partial face-to-face hours. With the rapid evolution of technology and pedagogical practices, educators are increasingly presented with a spectrum of choices regarding instructional methods. This study seeks to provide an insightful analysis of instructor perspectives on these teaching modalities, shedding light on the factors that influence their adoption, efficacy, and perceived impact on student learning. To gather a comprehensive understanding, a quantitative method research approach was employed. Data was collected through surveys involving a diverse range of educators across various academic disciplines. Instructors recognize the importance of adaptability in the modern classroom. They acknowledge that students possess varying learning styles and preferences, and, as a result, teaching modalities must be flexible to accommodate these differences. Educators increasingly embrace blended learning models, combining face-to-face instruction with online elements, to cater to the diverse needs of their students. The purpose of this research article is to offer a comprehensive analysis of instructors' perspectives on teaching modalities in the classroom. Emphasizing the importance of adaptability, the role of technology, the need for professional development, and the evolution of assessment practices in shaping contemporary pedagogy. Understanding and respecting the varied viewpoints of instructors is essential for the successful integration of teaching modalities and, ultimately, for improving the quality of education in the digital age.

Introduction

Online education has been the fastest expanding component of higher education. Because it is so different from traditional classroom-based settings, numerous doubts have been raised about the quality of education provided through the online modality. Enrollment in online programs, in the United States, continues to increase and has increased for the fourteenth straight year with over 3.2 million students enrolled exclusively in online classes (National Center for Education Statistics, 2018; Seaman et al., 2018). The United States has seen online course registrations grow approximately 10% from 2018 to 2019 while the total number of course registrations remained unchanged. At the same time, online education has a 20% higher attrition rate than face-to-face programs. This attrition has been attributed to a lack of engagement leading to students feeling isolated (Purarjomandlangrudi et al., 2016; Stott, 2016). Furthermore, the pandemic has moved many more students into the online environment as many colleges across the United States were forced to quickly move their classes online. It is currently unknown when full face-to-face instruction will resume.

As enrollments in online education continue to grow and the future of higher education course delivery remains unknown, it is imperative that educators design courses that are engaging and provide collaboration among students as well as faculty.

Research objectives

The objective of this research is to investigate instructors' perspectives about teaching modalities in the classroom in graduate higher education in a private university in Campbellsville, Kentucky.

Significance of the study

This study seeks to investigate instructors' perspectives about teaching modalities in the classroom to promote a sense of engagement in graduate online students. The results of the study will help teaching organizations to care for knowledge management to improve teaching modalities and understand what works best for classroom management and keeping students engaged.

Literature Review

As per Carle (2009) teaching modalities have evolved over time in response to changes in society, technology, and educational theory. In ancient civilizations, education was primarily oral, with knowledge being passed down through storytelling, chants, and memorization. Carle, (2009) further stated that formal education was often reserved for the elite, and the focus was mainly subjects such as philosophy, rhetoric, and literature. As per Carle (2009) the teacher-student relationship was characterized by a master-apprentice dynamic based as follows:

Print Revolution (15th - 17th Century)

The invention of the printing press by Johannes Gutenberg in the mid-15th century revolutionized education. Books became more accessible, leading to the proliferation of written materials and the standardization of curricula. This period saw the rise of formal schools and the emergence of more structured teaching methods.

Industrial Revolution (18th - 19th Century)

The Industrial Revolution brought about significant societal changes, leading to the need for a more standardized and mass-produced form of education to prepare individuals for factory work. The "factory model" of education, characterized by rigid schedules and standardized curriculum, emerged during this time.

Progressive Education (Late 19th - Early 20th Century)

Progressive education, championed by educators like John Dewey, emerged as a response to the rigidities of the factory model. It emphasized experiential learning, critical thinking, and a more child-centered approach. The focus shifted from rote memorization to active engagement and problem-solving.

Technological Advancements (20th Century)

The introduction of audio-visual aids, including film projectors, tape recorders, and later, computers, began to influence teaching methods. Distance learning and correspondence courses also became more feasible with the advent of the postal system and later, radio and television.

Digital Age (Late 20th Century - Present)

The proliferation of personal computers, the internet, and digital technologies transformed education once again. E-learning, blended learning, and online courses became more prevalent. The availability of multimedia resources, interactive simulations, and virtual classrooms opened up new possibilities for teaching and learning.

Personalized Learning and EdTech (21st Century)

Recent years have seen a growing emphasis on personalized learning, which tailors' education to individual student needs and preferences. Educational technology (EdTech) continues to play a pivotal role, with tools like learning management systems (LMS), virtual reality (VR), and artificial intelligence (AI) being integrated into teaching practices.

Globalization and Cultural Diversity

As per Alonso Dias & Blazquez Entonado (2009) society has become more interconnected, educators are increasingly recognizing the importance of culturally responsive teaching and inclusive education to accommodate diverse student populations. Alonso Dias & Blazquez Entonado (2009) caption these in the following:

Pandemic Response (2020s and onwards)

The COVID-19 pandemic accelerated the adoption of remote and hybrid learning models, necessitating a rapid shift to online teaching platforms and digital tools (Alonso Dias & Blazquez Entonado, 2009)

As per Alonso Dias & Blazquez Entonado (2009) in early 2022, there's a continued focus on flexible, learner-centered approaches. Competency-based education, micro-learning, and the integration of AI for personalized instruction are areas of ongoing development. The evolution of teaching modalities is ongoing, and educators are likely to continue adapting to new technologies and educational theories in the future (Alonso Dias & Blazquez Entonado, 2009).

Traditional Learning:

Traditional learning, also known as face-to-face or in-person learning, is the conventional method of education where students attend classes in a physical classroom setting with a teacher present. As per Alonso Dias & Blazquez Entonado (2009) traditional learning often involves direct interaction between students and the instructor, as well as peer-to-peer interaction.

As per Alonso Dias & Blazquez Entonado (2009) the characteristic of traditional learning includes:

- In-person instruction by a teacher or instructor.
- Structured classroom environment with set schedules.
- Face-to-face interaction between students and teachers.
- Use of textbooks, physical materials, and classroom resources.

Blended Learning:

Blended learning, also known as hybrid learning, combines elements of both traditional and online learning (Alonso Dias & Blazquez Entonado, 2009). In this modality, students participate in a mix of in-person classroom instruction and online learning activities. The online component may involve assignments, resources, discussions, or assessments. Alonso Dias & Blazquez Entonado (2009) characterize the following as to blended learning:

- Integration of face-to-face and online instruction.
- Flexibility in the delivery of content and activities.
- Utilization of digital tools and resources for learning.
- Opportunities for self-paced and independent learning online.

Online Learning:

Online learning, also known as e-learning or distance learning, is a mode of education where instruction and learning activities take place entirely over the internet or through digital platforms (Alonso Dias & Blazquez Entonado, 2009). As per Alonso Dias & Blazquez Entonado (2009) for online learning students engage with course materials, communicate with instructors and peers, and complete assignments online.

Characteristics of online learning as per Alonso Dias & Blazquez Entonado (2009) are as follows:

- Learning takes place via digital platforms, websites, or learning management systems (LMS).
- No physical classroom attendance is required.
- Instructional materials, assessments, and resources are accessible online.
- Provides flexibility in terms of time and location for learners.

These teaching modalities have unique advantages and may be chosen based on factors like the nature of the subject, learner preferences, access to technology, and external circumstances (such as during a pandemic). Many educational institutions now incorporate a combination of these modalities to create a more flexible and tailored learning experience for students.

Theoretical frameworks play a crucial role in shaping educational practices and informing research on teaching modalities. Liu, C. & Matthews, R. (2005) showcased three prominent theories for learning namely constructivism, social learning, and experiential learning and how they relate to the choice of teaching modalities:

Theories of Learning

Constructivism

Constructivism is a learning theory that posits that learners actively construct knowledge and meaning from their experiences (Liu & Matthews, 2005). The theory of constructivism emphasizes the importance of prior knowledge, social interaction, and individual interpretation in the learning process. As per Liu & Matthews, (2005) a traditional classroom setting, constructivism can be implemented through activities that engage students in critical thinking, problem-solving, and discussions Liu & Matthews, (2005) discuss using Socratic questioning techniques to encourage students to construct their own understanding. Constructivism aligns well with blended

learning, as it allows students to engage with content both online and in-person (Liu & Matthews, 2005). Online resources can provide opportunities for exploration, while face-to-face interactions can facilitate collaborative sense-making and knowledge application. Online learning platforms can be designed with constructivist principles in mind by incorporating interactive simulations, multimedia resources, and discussion forums that encourage active engagement and knowledge construction (Liu & Matthews, 2005).

Social Learning:

Social learning theory emphasizes the importance of social interaction and observation in the learning process. As per Brownstein, Brownstein, Gerlowski, (2008) social learning suggests that individuals learn from observing others and from the consequences of their actions in social contexts.

In a traditional classroom, social learning can be facilitated through group activities, discussions, and collaborative projects. These interactions allow students to learn from their peers, share perspectives, and develop communication skills.

Blended learning can promote social learning by providing opportunities for both in-person collaboration and online discussion forums (Brownstein, Brownstein, Gerlowski, 2008). Students can share experiences, exchange ideas, and learn from each other's viewpoints. Social learning can be fostered in online environments through collaborative tools, discussion boards, virtual group projects, and peer feedback mechanisms. Social media platforms can also be utilized to create virtual learning communities (Brownstein, Brownstein, Gerlowski, 2008).

Experiential Learning:

According to Carroll & O'Donnell, (2010) experiential learning theory emphasizes the importance of direct experience and reflection in the learning process. It proposes a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Experiential learning can be integrated into traditional classrooms through activities such as simulations, case studies, hands-on experiments, and field trips (Carroll & O'Donnell, 2010). These experiences provide students with opportunities to apply theory to real-world situations. Blended learning can incorporate experiential elements by combining online resources with in-person experiences. For example, students may engage in virtual simulations or virtual reality experiences before applying their knowledge in a hands-on lab or fieldwork. As per Carroll & O'Donnell, (2010) there may be challenges to implement experiential learning entirely online, virtual labs, interactive simulations, and virtual field trips can provide opportunities for students to engage in experiential learning activities in a digital environment.

In summary, theoretical frameworks like constructivism, social learning, and experiential learning provide valuable insights for designing and selecting appropriate teaching modalities. Each theory offers principles and strategies that can be applied to various educational contexts, including traditional, blended, and online learning environments.

Student and Instructor Perspectives on Various Teaching Modalities

The last few years have shown how professors and students have adapted to new teaching modalities. Some have excelled in this new endeavor while others, students, and professors alike, have been a little more resistant. Online/Remote learning has increased dramatically since the beginning of the COVID19 Pandemic. Teaching online and hybrid courses is a relatively new concept for many students and especially professors (Winters, Nogueira, Durand, & Arakawa-Belaunde, 2023)

The concept of online learning has been regarded by many academicians as not as rigorous, or academically challenging for students as the traditional brick and mortar classroom setting. Professors who are asked to transition to a different mode of instruction, normally online or hybrid, from what they have been accustomed to for years, could have a conflict with their expectations of an online course and with what their role in the course should be (Matos, 2023).

Many face-to face teachers still tend to believe that online education does not offer the same quality and integrity as a classroom setting offers (Matos, 2023). Furthermore, professors that do not possess the confidence or motivation needed for teaching in a new modality may hinder the development of the student academically and/or their own pedagogical advancement as well. In the case of these professors, individualized training will likely be needed to enhance their performance and their motivation. This training will prove beneficial in ensuring professors will be able to conduct classes effectively and efficiently in whatever modality is needed (Matos, 2023).

With the rapid development of information technology, simulators, cloud computing, Internet of Things (IoT) and various other teaching tools, there are multiple ways for professors to teach in different modalities and still ensure students are engaged, have their needs met, and stimulate their interest in learning (Nie, 2023).

Student-Centered Approach to Multiple Teaching Modalities

The student-centered approach has previously been associated with brick-and-mortar classes. This approach is centered around promoting creativity, collaboration, and problem solving (Koehler & Meech, 2022). Since the onset of the COVID-19 Pandemic, multiple technological advances have been developed to ensure professors have access to various avenues to ensure student success in all modes of delivery. This approach has greatly increased since new technologies have allowed for a more practical learning environment, instead of a more theoretical one.

One great aspect of the student-centered approach is that the method of teaching switches from teaching to guiding and the course content relies more on practice than theory which, in turn, leads to an increased enthusiasm for learning from students (Zhang, Zhang, & Zhang, 2023). Student-centered learning increases the chances that student's needs are met and entices students to achieve more due to being actively involved in the learning process. As students perform better, their grades will increase, attendance will increase and the possibility of students dropping out will decrease (Zhang, Zhang, & Zhang, 2023).

The normal brick and mortar teaching approach has been turned upside down over the past three years. Technology in the classroom, whether face-to-face or online, has increased dramatically and learning outcomes have followed suit. This was all due to the need for a better understanding of teaching and learning during the pandemic, as well as the desire to ensure students and professors have the tools and opportunities, they need to enhance their skills in areas that may have been underdeveloped (Koehler & Meech, 2022).

Online and Hybrid delivery modes are becoming the new normal within the higher education arena. All stakeholders are responsible for ensuring students have a productive learning community. These communities are comprised of instructional technologists, professors, graphic designers, and administrators to name a few. These learning communities are paramount to the success of students, the institution, and higher education as a whole (Galvis & Carvajal, 2022).

Faculty Development and Training

According to a study on faculty members' involvement in faculty development, the study participants claimed that faculty development represented their overall growth as faculty members (Steinert, 2012). They did not just see faculty development as the improvement of certain abilities linked to teaching, research, or administration, but also as the growth of themselves as faculty members, including personal and professional development. Even though faculty members welcome the chance to define their career goals and values, form collaborative relationships, and acquire skills to advance their career path, the literature, curiously, does not report many faculty development programs that focus on career development (Steinert, 2012).

It would appear that investing in career development through faculty development constitutes a crucial step forward given that faculty members are our most valuable resource (Whittaker & Montgomery, 2014). Seminars in this area could concentrate on developing academic identities, career planning (including a summary of various career choices), and the benefits of mentoring. Mentorship may really improve hiring, retention, and the atmosphere that supports the academic position, and as a result, it should be considered as an educational area and a method in the development of faculty (Whittaker & Montgomery, 2014). The promotion of wellbeing, burnout prevention, and time management should all be seen as crucial areas for faculty development (Whittaker & Montgomery, 2014).

Faculty development can be a key factor in encouraging organizational and curricular change (Whittaker & Montgomery, 2014; Steinert, 2012). In other words, it may support the promotion of teaching as a research activity and foster an environment in the classroom that values and honors leadership, creativity, and quality in education (Whittaker & Montgomery, 2014; Steinert, 2012). Additionally, faculty development can promote changes to the curriculum and foster consensus as well as enthusiasm (Whittaker & Montgomery, 2014; Steinert, 2012). By addressing the formal, informal, and hidden curricula and strengthening organizational capabilities, it can also help to change the institutional culture (Whittaker & Montgomery, 2014; Steinert, 2012). Faculty development, for instance, can encourage culture change by assisting in the development of institutional policies that support and reward excellence in teaching, communicate the expectation of professionalism among all faculty members, encourage a reexamination of the requirements for academic promotion, if appropriate, and offer educational opportunities (Whittaker & Montgomery, 2014; Steinert, 2012).

Challenges and Barriers

Professors had to modify their old teaching strategies and become accustomed to new online teaching platforms after institutions decided to relocate their classes online due to the COVID-19 virus fears (Na & Jung, 2021). This was done in order to continue the delivery of meaningful learning experiences. However, despite their efforts, a number of research indicates that teachers still encounter challenges when instructing in distant classrooms. To lessen the burdens, it is vital to recognize these issues and offer the proper support (Na & Jung, 2021).

Despite being compelled to close their facilities because of the COVID-19 outbreak, schools have been able to maintain instructional programs in large part uninterrupted. There are, nevertheless, a number of difficulties to overcome. In a recent study conducted in Italy, a number of technological, educational, and societal issues have been highlighted as a consequence of the examination of an online discussion forum with international experts, ISTAT data, and remarks made by opinion leaders in Italy (Ferri, Grifoni, & Guzzo, 2020).

The most significant technological issues include the unpredictability of Internet connections when thousands of students and workers are connected at once, as well as the fact that many students lack technology devices. Numerous research, notably in developing nations like Ghana and Malaysia, have emphasized this issue (Ferri, Grifoni, & Guzzo, 2020). Given the abundance of online resources and the lack of structured content, as well as the social and cognitive issues that teachers and schools must address in this situation, the pedagogical challenges are related to the lack of digital skills on the part of both teachers and learners. Students' lack of engagement and motivation is linked to the societal issue of the decline in interpersonal communication between teachers and students as well as among students (Ferri, Grifoni, & Guzzo, 2020).

In order to keep students' attention, a clear and consistent strategy should be created, offering structured and planned educational material (content, methodologies, and common goals), as well as more suitable e-learning platforms that make use of interactive suitable digital learning resources (video, animations, quizzes, and games) (Na & Jung, 2021; Ferri, Grifoni, & Guzzo, 2020). Co-creation platforms might be created and made accessible to encourage student involvement in the production of instructional materials (Na & Jung, 2021; Ferri, Grifoni, & Guzzo, 2020). Also, whenever possible, a blended approach should be employed to strengthen a sense of community belonging, enhancing social contact and collaboration between students and teachers as well as among them (Na & Jung, 2021; Ferri, Grifoni, & Guzzo, 2020). Experts believe that as students require in-person contacts, face-to-face instruction should be used in conjunction with online instruction (Na & Jung, 2021; Ferri, Grifoni, & Guzzo, 2020). To promote customized, inclusive, and participative online learning paths, the use of intelligent technologies for remote education, such as artificial intelligence, needs to be strengthened. If this is integrated with the pedagogical approach teachers employ, it can create new opportunities and add value to online learning. In reality, this study showed the need for more effective personalization of learning (Na & Jung, 2021; Ferri, Grifoni, & Guzzo, 2020).

Methods

Data were collected from 33 graduate business professors using a questionnaire of instructors' perspectives about teaching modalities in the classroom.

Please indicate your gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	17	51.5	53.1	53.1
	Female	14	42.4	43.8	96.9
	Prefer Not to Say	1	3.0	3.1	100.0
	Total	32	97.0	100.0	
Missing	System	1	3.0		
Total		33	100.0		

Table I Gender

How many years of experience do you have in teaching graduate courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 or 1	4	12.1	12.1	12.1
	2 or 4	5	15.2	15.2	27.3
	>5	24	72.7	72.7	100.0
	Total	33	100.0	100.0	

Table II Age

Study Population

Data were collected from graduate business professors at Campbellsville University in KY, USA via Survey Monkey Thursday, November 2, 2023. We performed convenience sampling by recruiting participants from the Graduate Business Program at Campbellsville University. The participants voluntarily provided informed consent. Professors were instructed via email to complete the survey online using a link from Survey Monkey. The duration for survey completion was approximately 5 minutes. The appropriate sample size required for regression analysis was computed using the G*Power 3.1.9.2 software. For an effect size (f^2) of 0.02, significance (α) of 0.05, and power ($1 - \beta$) of 0.80, the minimum required sample size was 50, and we distributed the survey online to 50 graduate business professors with the hope of no potential withdrawal. A total of 33 surveys were retrieved in the final analysis.

Validity: To measure the validity of the questionnaire, the questionnaire was distributed to 15 professors outside the sample. The notes and feedback about the survey were collected. The language and research notes were collected on the survey before its final distribution.

Reliability: To measure the reliability of this questionnaire, Cronbach's Alpha was used, and the results show that the value of Cronbach's alpha was more than 0.6 for all variables of the study, which makes it reliable.

Measures

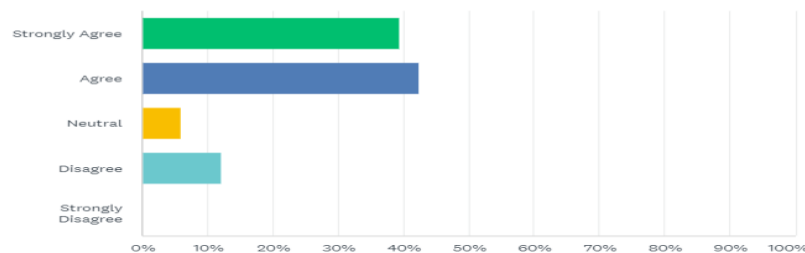
General characteristics

We collected information about participants' sex and age with sex characterized as male and female and age with the ranges of 18-24, 25-34, 35-44, and 45+.

The professors responded the following questions:

Please indicate your level of agreement with the statement: "Blended learning, combining both online and in-person instruction, enhances student engagement and learning outcomes."

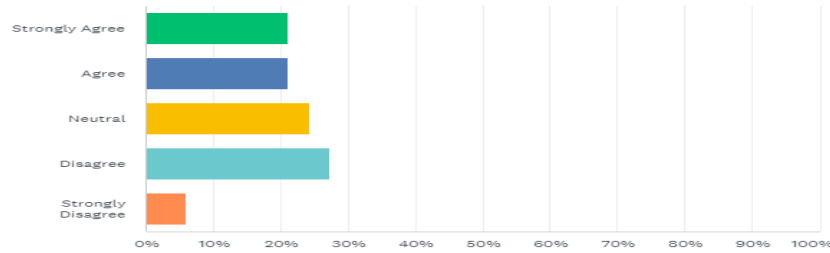
Answered: 33 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly Agree	39.39%	13
Agree	42.42%	14
Neutral	6.06%	2
Disagree	12.12%	4
Strongly Disagree	0.00%	0
TOTAL		33

To what extent do you agree with the following statement: "Traditional face-to-face teaching is the most effective teaching modality for fostering meaningful student-teacher interactions"?

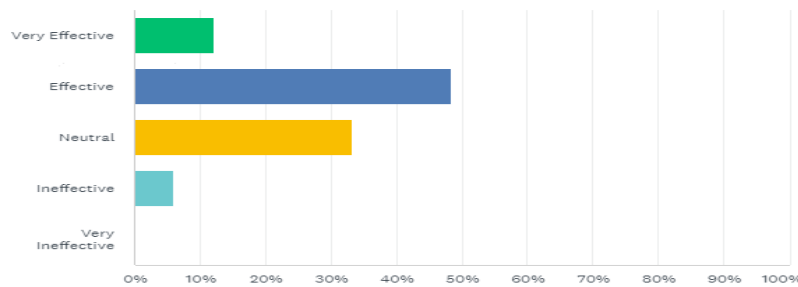
Answered: 33 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly Agree	21.21%	7
Agree	21.21%	7
Neutral	24.24%	8
Disagree	27.27%	9
Strongly Disagree	6.06%	2
TOTAL		33

How effective do you believe online synchronous classes (real-time, online instruction) are in facilitating student participation and interaction?

Answered: 33 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very Effective	12.12%	4
Effective	48.48%	16
Neutral	33.33%	11
Ineffective	6.06%	2
Very Ineffective	0.00%	0
TOTAL		33

Statistical Analysis

As described in the research design, the instructors were given a choice to indicate their level of agreement with the statement: "Blended learning, combining both online and in-person instruction, enhances student engagement and learning outcomes." A total of 14 (42.42%) instructors agree with the statement, 13 (39.39%) instructors strongly agree with the statement, whereas 4 instructors (12.12%) disagree with the statement. Moreover, when asked on the survey to what extent do you agree with the following statement: "Traditional face-to-face teaching is the most effective teaching modality for fostering meaningful student-teacher interactions"? a total of 7 (21.21%) instructors agrees with the statement, and 9 (27.27%) instructors disagree with the statement. However, when asked on the survey how effective do they believe online synchronous classes (real-time, online instruction) are in facilitating student participation and interaction, the majority of instructors 20 (60.60%) selected effective and very effective.

With the ever-changing educational landscape, consideration should be taken because many students did not start their college-level program expecting to complete their degree requirements in the online environment. Those who did choose to continue their education in the online environment may have very little experience learning in an asynchronous classroom. Flexibility in teaching modalities can cater to diverse learning styles and preferences

among students. The use of blended learning, combining both online and in-person instruction, enhances student engagement and learning outcomes, which could be a useful bridge from a traditional in-person classroom to the world of online learning. Faculty should create guidelines on the way to use new technology, setting online learning expectations, and cultivating a safe learning environment will be essential when attempting to create an engaging online classroom. Flipped classroom models, where students learn content before class and engage in active learning during class, may improve overall learning outcomes. Also, incorporating real-world case studies and practical applications in the curriculum may improve the relevance of classroom instruction.

Quantitative Results

Statistics were utilized to ascertain the instructors’ perceptions about teaching modalities in the classroom for a graduate hybrid program. In the survey, the instructors were asked to reflect on their preferences and comfort levels with blended learning, combining both online and in-person instruction, and how it enhances student engagement and learning outcomes. Most of the instructors reported that they preferred a blended learning environment, the instructors were given a choice for their preferred teaching modality and stated they could use either a face-to-face instruction or online instruction, perhaps a combination of both. Descriptive and inferential statistics, specifically an ANOVA, were used to analyze the results from the survey. For the Likert-scale survey, the instructors were asked to reflect on teaching modalities from the course and then indicate the extent to which they strongly agree (5) strongly disagree (1) with each phrase as it relates to a blended learning environment. Instructors’ perspective on blended teaching modalities from the course was statistically significant for incorporating real-world case studies and practical applications in the curriculum, which improves the relevance of classroom instruction, $F(5, 27) = 3.274, p < .019$; and the effectiveness of peer-to-peer collaborative projects and group activities in promoting a deeper understanding of course material in various teaching modalities, $F(5, 27) = 3.416, p < .016$.

	ANOVA					F	Sig.
		Sum of Squares	df	Mean Square			
Please indicate your level of agreement with the statement: "Blended learning, combining both online and in-person instruction, enhances student engagement and learning outcomes."	Between Groups	3.418	5	.684	.676	.645	
	Within Groups	27.309	27	1.011			
	Total	30.727	32				
To what extent do you agree with the following statement: "Traditional face-to-face teaching is the most effective teaching modality for fostering meaningful student-teacher interactions"?	Between Groups	8.933	5	1.787	1.173	.348	
	Within Groups	41.127	27	1.523			
	Total	50.061	32				
How effective do you believe online synchronous classes (real-time, online instruction) are in facilitating student participation and interaction?	Between Groups	4.006	5	.801	1.411	.252	
	Within Groups	15.327	27	.568			
	Total	19.333	32				
Please rate the following statement: "Flipped classroom models, where students learn content before class and engage in active learning during class, improve overall learning outcomes."	Between Groups	2.918	5	.584	.803	.558	
	Within Groups	19.627	27	.727			
	Total	22.545	32				
How strongly do you agree with the idea that self-paced online courses (asynchronous) can provide students with more flexibility in their learning schedules?	Between Groups	1.370	5	.274	.577	.717	
	Within Groups	12.812	27	.475			
	Total	14.182	32				
In your experience, how effective is the use of educational technology (e.g., learning management systems, multimedia tools) in enhancing the teaching and learning experience?	Between Groups	1.115	5	.223	.541	.743	
	Within Groups	11.127	27	.412			
	Total	12.242	32				
Please rate your level of agreement with the statement: "Incorporating real-world case studies and practical applications in the curriculum improves the relevance of classroom instruction."	Between Groups	2.082	5	.416	3.274	.019	
	Within Groups	3.433	27	.127			
	Total	5.515	32				
To what extent do you believe that student feedback and input should influence the choice of teaching modality for a particular course?	Between Groups	5.112	5	1.022	2.028	.107	
	Within Groups	13.615	27	.504			
	Total	18.727	32				
How effective are peer-to-peer collaborative projects and group activities in promoting a deeper understanding of course material in various teaching modalities?	Between Groups	12.494	5	2.499	3.416	.016	
	Within Groups	19.748	27	.731			
	Total	32.242	32				
Please indicate your level of agreement with the statement: "Flexibility in teaching modalities can cater to diverse learning styles and preferences among students."	Between Groups	1.797	5	.359	.603	.698	
	Within Groups	16.082	27	.596			
	Total	17.879	32				

Discussion

Limitations

There are several limitations to this study. While the small sample size of 33 participants can be considered a limitation, there are no large studies to date that investigate instructors' perspectives about teaching modalities in the classroom. This study included instructors from graduate programs; therefore, future studies should include instructors from various disciplines and levels of education. This would provide insight into how social presence is perceived by a more diverse population. Future studies on teaching modalities in the classroom should focus on harnessing emerging technologies, adapting to evolving educational needs, and exploring the impact of diverse learning environments. Researchers should continue to investigate how virtual and augmented reality, artificial intelligence, and other innovative tools can enhance traditional teaching methods and provide more personalized learning experiences. Moreover, the ongoing examination of remote and hybrid learning models, which gained prominence during the COVID-19 pandemic, will shed light on the optimal balance between in-person and online instruction. As education continues to evolve, these studies will help educators refine their approaches, ensuring that the classroom remains an effective and inclusive space for students of all backgrounds and abilities.

Recommendations

Recommendations for teaching modalities in the classroom should prioritize flexibility and adaptability, recognizing that a one-size-fits-all approach is often insufficient in meeting diverse learning needs. Educators should harness technology as a valuable tool, incorporating it to enhance engagement and facilitate personalized learning experiences. Additionally, a balanced mix of in-person and online instruction should be considered, leveraging the strengths of each modality to create a dynamic and resilient educational environment. Furthermore, fostering a student-centered approach, where active participation and critical thinking are encouraged, remains crucial. Finally, instructor professional development should continually address evolving pedagogical strategies and technology integration, ensuring that educators are well-equipped to navigate the ever-changing landscape of teaching modalities and deliver high-quality education to their students.

Conclusion

The study identified instructional activities of teaching modalities in hybrid courses. Educators believe that courses should be engaging, motivating, and allow students to develop a greater understanding of the content. Research shows when the strengths of online tools and face-to-face interactions were present, students perceived the support of instructors as well as the convenience of being able to work at their own pace on their own time. Varied opportunities for interacting with the content, and the recognition of diverse learning preferences, were very important for the educators of this study. Educators supported the placement of instructional activities in classes was significant and impacted largely students' engagement with course content. The purpose of an online class is to provide information, prepare students for face-to-face activities, and review or practice what was learned. The purpose of a hybrid or blended class is to take advantage of the best features of both online and more traditional forms of learning to complement, reinforce and elaborate on one another. The purpose of a face-to-face class is to ask questions, receive immediate feedback, share experiences and perspectives, collaborate with classmates, and network with classmates. There is the need to have dynamic connections between face-to-face, hybrid, and online classes and educators increasingly embrace blended learning models, combining face-to-face instruction with online elements, to cater to the diverse needs of their students.

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