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Article

Students' Instructional Delivery Approach Preference for Sustainable Learning Amidst the Emergence of Hybrid Teaching Post the Pandemic

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Abstract: On return to campus after the pandemic, students were subjected to receiving lectures online, in class, or by the emerging hybrid approach. This study reports students' preference over the three approaches based on the experience gained during the 2022/23 academic session. One hundred and twenty-seven (127) on-campus Education students in one public university in Malaysia participated in the study. Data was collected through an online forum and interviews with the participants. The data collected was analyzed using content and thematic analysis. Preference for the hybrid approach emerged as a finding with three themes describing what makes the wholly online class unpopular (themes one and two); and, the popularity of the hybrid approach (theme three): 1. On-campus learner-environment challenges; 2. Perceived lack of Faculty engagement and support in the online learning environment; and, 3. Student engagement through faculty presence and technology innovation. What the students valued most in the hybrid approach is the face-to-face technology-enhanced classroom interaction that is retained, believing that learning is more effective and interesting in class than online. They considered the additional online learning activities as complementing the classroom learning. The approach provides an opportunity for fundamental learning in class and supplementary learning online. These findings imply that institutions should prioritize technology integration into face-to-face instruction, leveraging innovative approaches to enhance student engagement and learning outcomes. Lecturers should consider adopting hybrid teaching models that combine the benefits of in-person interaction with the flexibility of online learning, catering to diverse student preferences and optimizing the educational experience.

Keywords: Online-class; in-class; emerging-hybrid; New-Normal; Students-preference

1. Introduction

Before the pandemic, higher learning institutions ran on-campus and online programs separately to meet the learning needs of on-campus and off-campus students [1,2]. Each program is structured to meet the learning needs of its target audience [3]. The two programs differ significantly in their course design, pedagogical approach, instructional design, delivery platforms, learning activity, method of engagement, and assessment [4,5]. This is because the learning needs of target beneficiaries for the two programs differ [6]. Virtual Classrooms leveraging video-conferencing platforms and associated online tools (for teaching and assessment) are used in facilitating Faculty-learner engagement in online structured programs [7]. On the contrary, the on-campus programs are structured for facilitation through either the traditional face-to-face classroom instructional delivery approach or the in-class technology-enhanced instructional delivery approach [8]. Thus, faculty members handling online courses are specially trained for that [9]. That structure was destabilized with the introduction of 'emergency remote teaching' where all categories of learners (for both the

online and on-campus programs) were subjected to online teaching handled by experienced and inexperienced faculty members during the pandemic. With the new technological experience gained during the pandemic and current policy initiatives to promote hybrid learning in many settings, pedagogical practices and instructional delivery approaches for on-campus programs are never the same after the pandemic.

Two on-campus instructional delivery practices emerged after the pandemic. Faculties can now choose to teach in class (face-to-face) or online (virtual classroom) while students are on campus. As the online class gains popularity among faculties while being institutionalized; we are now witnessing the gradual emergence of a new approach (the hybrid teaching) consuming the popularity of previous approaches. The emerging hybrid teaching approach as used in this study means that 'teaching-learning activities start with the technology-enhanced face-to-face interaction in the classroom and continue with additional online learning activities monitored by the Lecturer'. The in-class approach means 'teaching-learning activities start and end with learner-faculty engagement in a technology-enhanced face-to-face classroom interaction'. The online class on the other hand is where the learner-faculty engagement starts and ends in the online virtual classroom only. These operational definitions are based on what is in practice (from 2022) as experienced by the research participants.

Based on the records from the Learning Management System Portal in the research site reported in this paper, the use of an in-class teaching approach accounted for 60% and online class option usage accounted for 40% between March to June 2023. Between August to September 2023, faculty use of the in-class option dropped to 38% while the use of the online class option rose to 62%. From October to December 2023, the online class option usage accounted for only 23% while the emerging hybrid practice accounted for 77% consuming the in-class option, making the online class a less preferred option for faculties. This indicates that the hybrid teaching approach is gradually becoming the faculty's most preferred instructional delivery approach. While the records show faculties instructional delivery preference over time, not much is available to determine students' preferences between the three instructional delivery options used by the faculty. Therefore, this study aims to investigate students' preferences over the three approaches based on the experience gained during the 2022/23 academic session.

Much is reported in the literature on students' preference between face-to-face and online class options before the pandemic when on-campus students were less exposed to online teaching [10]. Much has also been reported about students' preference between the conventional practice before the pandemic; and, the online teaching adopted during the pandemic (when faculties and students were at home with no option of the face-to-face approach) [11]. Not much is reported about the current position of students' instructional delivery preference amidst the gradual emergence of hybrid teaching as noticed in Malaysian campuses. The limited studies on hybrid education in Malaysia report how it can be sustained [12] and its effects on teaching and learning [13]. Not much is also reported about how faculties use the hybrid approach in their instructional delivery practices in Malaysia [14]. This study investigates students' preference over the three instructional delivery approaches used by faculties in the era of the new normal (online, in-class, and the emerging hybrid option). The following research questions guide the study:

1. What is the preferred instructional delivery approach (in-class, online, or hybrid) among on-campus University students?
2. What factors contribute to the popularity of the most preferred instructional delivery approach among the on-campus students?
3. What factors contribute to the unpopularity of the less preferred instructional delivery approach among the on-campus students?

To address these research questions, we elaborate on the methodology employed for the study. Subsequently, we present the three emergent themes identified in the study and share our reflections on the implications of these findings.

2. Materials and Methods

2.1. Design of the Study

The study employed a qualitative case study design, chosen for its effectiveness in examining complex phenomena within their real-life contexts [15]. The delineation of the 'case' assumes utmost importance as it defines the 'unit of analysis'. In this study, the 'case' pertains to students' preferences regarding instructional delivery amidst technology integration in educational settings. The study therefore was implemented in two phases. The focus of the first phase was to determine on-campus students' preference over the emerging hybrid teaching approach as compared to in-class and online class options used by Faculty Members post the pandemic. The second phase was to find out why the preferred option (in-class, online class, or the emerging hybrid teaching approach) is popular; and, why the less preferred options are unpopular.

2.2. Context and Participants

One hundred and twenty-seven (127) on-campus education students in one of the public universities in Malaysia participated in the study. Purposive sampling was used in selecting only the 7th Semester Students taking philosophy and Classroom Management second-semester general education courses during the 2022/23 academic session as participants. The 7th-semester students were considered and selected for the study because they were familiar with different instructional delivery modes before, during, and after the Pandemic. The selected participants are from various departments within the education faculty.

2.3. Data Collection

Three sets of data were collected sequentially based on the research design. The first data was collected through an Online Forum created during the first phase for participants to indicate their preference over the three options used by faculties. The second data was collected when the second forum discussion was created for participants to discuss reasons for their preferred options. Discussion in the forum was open-ended and lasted for two months. The third data was collected through one-on-one in-depth interviews with ten participants who volunteered to participate in the interviews conducted after the forum discussion was closed. The interview session for each participant (which lasted between 35-50 minutes) was conducted at the time and venue suggested by the participants. The first data collected was to answer research question one raised for the first part of the study. The second and third data were collected for the second and third research questions raised for the second phase.

2.4. Procedure for Data Analysis

The first online forum data collected was analyzed using a content analysis approach. Participants' response on their preferred mode of delivery was downloaded as a report from the online portal and used as raw data transcripts for analysis after removing and replacing the identity of the participants with simple descriptive codes. Comments of participants in the forum regarding what they indicated as their preference were sorted, studied, and categorized.

The second online forum discussion and the interview data collected were analyzed using [16] six-phase thematic analysis approach. The audio data collected from the interviews were transcribed and saved as a Word Document for analysis. The field note taken was typed and also saved as a Word Document. The online forum discussion was downloaded and saved after removing and replacing the identity of the participants with simple codes for analysis. The three sets of scripts prepared for analysis were reviewed thoroughly many times at the first stage of [16] six-phase thematic analysis. An open coding approach was used in identifying initial codes from the data sets at the second stage. The data set was streamed down using the initial codes that were identified. This was done by extracting relevant information from the data set and matching them with their corresponding codes. A sample of the codes-extracts matching is presented in Table 1.

Table 1. Sample Data Extracts Matching.

S/No	Data Extracts	Initial Code Generated
1	“If the class would be online, getting the right environment with the kind of quietness you need on the campus is a big challenge. This was not the case during the lockdown because our parents helped us to get the environment under control” (P4).	Distraction
2	“We don’t make much from the online classes because we are joining the class either from the canteen or our hostel rooms and you can imagine the kind of distraction you get. If you want to get a quiet environment you need to go to the library and use a headphone but the problem with joining the class from the library is that you cannot ask or respond to questions during the class” (P4).	Learning Difficulty
3	“Knowing that there may be no eye-to-eye contact with the course lecturer when the class starts except when there is a question to ask or to answer, I am always tempted to look for something else to do as soon as we switch off our camera and mute our microphone. I always have a divided mind in online classes because of that. This is not the case with the face-to-face class where the eyes of the teacher are on the students throughout the class” (P2).	Difficulty in paying attention
4	“I think the belief that I can always learn whatever I missed from the online class on my own makes me develop a nonchalant attitude that is always affecting my concentration to learn during online classes. Because of that belief most of the time I try to be multi-tasking doing other things while the lesson is ongoing” (P7).	Hard time concentrating

The codes generated were carefully studied to see how they associate and differ at the third stage of the analysis. Related codes were clustered and reviewed to see if they formed any meaningful pattern to be considered a theme. The themes identified were reviewed and defined in the fourth and fifth stages. A report of the findings was generated at stage six of the analysis leveraging ‘faculty presence, support, and engagement’ in the emerging Hybrid approach appearing as the crux of the thematic map that emerged in the study.

In the next section, we present the findings from the data analysis procedure discussed

3. Results

The findings of the study are presented according to the research questions stated. We present a quantitative description of data analysis results on students' preferences regarding the three instructional delivery methods. Subsequently, we delve into an in-depth analysis of the underlying reasons for students' preferences.

Table 2 presents analysis results of students’ preferences for the face-to-face, online, and hybrid delivery approaches. Our categorization emerged as presented. A-category are those that prefer the face-to-face classroom teaching option. The B-categories prefer the online class option. The C-categories prefer the Hybrid approach. D-category perspectives are those with no preference for any option, believing that all the opinions are good in their context.

Table 2. Categorization of perspectives identified from the online Forum Data.

Respondents Groups	Face-to-face preference	Online class preference	Hybrid preference	No preference	Total Per Group
Philosophy Class	4	2	46	2	55
Classroom Management Class	9	3	54	8	72
Total Per Category	13	5	100	10	127

As presented in Table 2, the result of the analysis shows that students prefer the emerging hybrid teaching approach (n = 100/127) over the in-class (n = 13/127), and online class options (n = 5/127). More specifically, the preference of forty-six participants out of fifty-five (84%) in the philosophy class are in the hybrid preference Category; and, the preference of fifty-four out of Seventy-two participants (75%) in the classroom management class is also the hybrid option. A total of one hundred participants out of one hundred and twenty-seven (79%) prefer the hybrid approach. This finding shows the popularity of the hybrid approach option over the online and face-to-face options.

The thematic analysis of the data collected for research questions two and three reveals four initial impressions at the early stages of analysis as presented in Table 3.

Table 3. Initial Impressions of the Data Sets at the Familiarization Stage.

S/No	The Initial Impressions
1	It seems there are challenges associated with how Faculties use the online class option in their teaching that is making the online less prepared by students;
2	There seem to be challenges peculiar to students on campus that are making learning in the online class difficult for students;
3	It seems Faculties are adopting new approaches in their in-class instructional delivery approach that work better for students on campus; and,
4	Participants seem to believe that the online class option is not necessary since they are on campus; and, it's like whatever Faculties do in their online class they do it better when they teach in-class

Eleven (11) and thirteen (13) codes were identified for research questions two and three respectively. Clustering the identified codes based on their degree of association in search of themes shows three (3) emerging themes as presented in Tables 4–6, and the summary of all emergent themes in Table 7.

Table 4. Clustering of Codes 1-5 in Search of a Theme.

The Codes	The Emerging Theme	The Sub-themes
1. Distraction 2. Learning Difficulty 3. difficulty in paying attention 4. hard time concentrating 5. Frustration	On-campus learner-environment challenges	1. Nature of student’s hostel; 2. places other than hostels on the campus; 3. Family Support as a factor

As shown in Table 4, the degree of association between five clustered codes (1-5) identified in the study formed a meaning pattern that led to the emergence of one theme and three sub-themes as factors that make the online class unpopular among students. On the other hand, the issues identified as codes are eliminated by the hybrid approach because the face-to-face teaching approach is retained.

Table 5. Clustering of Codes 6-11 in search of themes.

The Codes	Emerging Theme	Sub-themes
6. Nature of the online class learning environment 7. Faculty presence is not felt 8. Faculty supervision and guidance are not felt	Perceived Lack of Faculty Engagement and Support in the Online Learning Environment.	1. Class management and control is lost. 2. Students feel abandoned and neglected

9. Faculties hardly notice those having challenges

10. Learners feel alone in their effort to learn

11. It provides room for self-deception in learning

Another theme and two sub-themes were identified as factors making the online class unpopular based on the degree of association between six codes (codes 6-11) as presented in Table 5. The theme also explains why students prefer the hybrid approach.

Table 6. Clustering of Codes 12-23.

The Codes	Emerging Theme	The Sub-themes
12. Faculty's innovative use of technology in class and online.	Student engagement through faculty presence and technology innovation	1. Effective Class control and Management;
13. More engaged learning experience in class and online		2. Positive influence of technology;
14. Memorable learning experience in class and online		3. Positive influence of physical Social Interaction.
15. learners are motivated by the physical presence of faculties		
16. the physical classroom as a controlled social learning environment		
17. Effective Faculty supervision and guidance		
18. The psychological effect of the physical classroom		
19. Effective monitoring		
20. No room for irresponsibility		
21. The faculty effort of carrying everyone along is felt.		
22. Learners get the collective and individual attention they need.		
23. Faculty-student communication is encouraged		

Three sub-themes and one theme also emerged based on the degree of association between the nine codes (12-22) clustered in search of a theme as presented in Table 6. The theme and sub-themes indicated why in-class teaching (face-to-face) is valued; and as reasons why the hybrid approach is most preferred.

Three themes and eight sub-themes emerged as findings (see Table 7). Themes one and two indicated why the wholly online class option is unpopular. On the contrary, the two themes also explain why the hybrid option is most preferred. The third theme indicated why the in-class option is popular. It also shows why the Hybrid approach is most preferred.

Table 7. Emerged Themes of Sub-themes.

S/No	Themes	The Sub-themes
1	On-campus learner-environment Challenges.	1. Nature of student’s hostel; 2. Places other than hostels on Campus; 3. Family Support as a factor
2	Perceived Lack of Faculty Engagement and Support in the Online Learning Environment.	1. Class management and control is lost. 2. Students feel abandoned and neglected
3	Student engagement through faculty presence and tech innovation.	1. Effective Class control and Management; 2. Effect of technology; 3. Effect of physical Social Interaction
Total	3	8

4. Discussion

Students returned after the pandemic to meet new instructional delivery arrangements on campus. Contrary to what they were used to, students on campus are now to receive lectures either online, in class, or through the emerging hybrid teaching approach. Depending on what the faculty decides. This study is directed toward understanding the implications of this practice on teaching and learning based on students' experiences with receiving lectures in class, online, or using the hybrid teaching approach on campus after the pandemic. To achieve the aim of the study, students' preferences over the three instructional delivery options were examined in the first phases of the study. The popularity and unpopularity of the preferred and less preferred options were investigated in the second phase. Preference for the hybrid approach as a finding is discussed first (4.1) followed by a discussion on why the hybrid option emerged as the most preferred option based on the three Themes that emerged.

4.1. On-Campus Students’ Preference for the Hybrid Teaching Approach

The findings from the study reveal that 79% (100 out of 127) of the participants prefer the emerging hybrid teaching approach over the in-class and online class options. What previous studies reported in the literature differ over time and place. While some of the studies reported students' preference for the hybrid approach [17,18] as consistent with the findings of this study, others reported the contrary. Some studies reported students' preferences for face-to-face (the In-class option) over hybrid and online options [19]. [20] reported students' preference for online classes instead of hybrid and face-to-face options. Other studies reported a preference for face-to-face and hybrid [21,22]. The inconsistency of the findings in the previous studies became a strong rationale for this paper.

The reports of the studies conducted during the pandemic were likely to have been influenced by the remote online teaching they were subjected to with no option [23]. As influenced by this factor, such studies reported a preference for the online class option [20]. On the contrary, others reported a preference for a return to normal [2,24]; and, a strong preference for face-to-face [25,26]. In South Africa for example, the majority of the students in urban settings prefer online delivery mode because of convenience and flexibility, and those in rural settings prefer face-to-face mode due to challenges with internet connectivity [27].

Related studies after the pandemic were either reporting the strengths and weaknesses of the online classes (based on experience gained during the pandemic); or the potential of online technologies in future educational practices. The flow of literature on these and other studies examining how such technologies can support on-campus educational practices created the ongoing

discourse on hybrid education. The experience of students who participated in the limited studies examining students' preferences immediately after the lockdown is limited to face-to-face (acquired before the pandemic) and online teaching (acquired during the pandemic) only. Thus, reporting a preference for face-to-face [28,29].

The preference for the hybrid mode of delivery by many students as revealed in this study, offers a balanced solution to challenges identified in the literature to face-to-face and online delivery modes. In the next section, we provide more insight into the reasons for the preference for the hybrid mode, which creates a flexible and inclusive learning environment, fostering engagement and effective integration of technology into teaching practices.

4.2. Why the Emerging Hybrid Approach?

Three themes emerged during the second phase of the study describing why the hybrid teaching approach is most preferred over the online and in-class options based on students' experience of receiving lectures in class, online, and by hybrid approach while on campus during the 2022/2023 academic session (see Table 7).

On-Campus Learning-Environment Challenges

Findings from the study indicated that students are getting frustrated searching for a convenient place on campus to join their online classes. They join online classes mostly from their hostel rooms, coffee shops, cafeteria, mosque, and sometimes from the library. These are public places on campus that the students have no control over. None of these places except the library is free from uncontrolled noises and human activities that can be a distraction. Such distractions from the surrounding environment affect students' concentration and make learning difficult during online classes. Students who join the class in the library are also restricted from active participation, as silence is required in the library spaces. This challenging situation the students on campus face makes online classes less preferred and unpopular. How students live on campus differs from how they live at home. Students' activities at home are checked by family/parental control. But, while on campus they do what they want to do. Students' activities and how they live on campus affect their concentration and prevent them from paying attention in their online classes. These challenges make the online class option unpopular among students. On the contrary, these issues are eliminated by the design of the Hybrid approach because the in-class teaching activity and students' active participation are sustained. Thus, the Hybrid approach is popular and preferred over the online class option because of these factors.

This finding is consistent with what is reported in the literature over time. [30] also reported disturbances and distractions associated with students' surroundings as aspects of 'learning-situational challenges' that make online classes ineffective as compared to in-class teaching. Difficulty in concentrating is continuously reported in the literature as a challenging factor affecting students learning in online classes [31] and noise [32]. [33] reported that students' concentration in online classes is greatly affected by multitasking: doing laundry, playing games, chatting, text-messaging, and watching arousal videos were reported as what students do during online lectures.

A summary of what is reported based on a review of the literature shows that multitasking, mind wandering, uncontrol use of smart devices, and uncontrolled interference during classes are consistently being reported as distractions [34]. Many studies reported such distractions negatively impact students' learning if classes are online [33,35].

Perceived Lack of Faculty Engagement and Support in the online Learning Environment

Linked to the first finding, the online classroom environment does not allow Faculties to control students' behavior and actions behind the screen during lectures. By practice, students joining online classes do so with the mic mute and their video camera off to avoid disturbing the class with background noise and motion images. Faculties management and control over the classroom as a learning environment is lost due to this practice. Faculties cannot hear and see what students are

doing during class sessions. Thus, monitoring students' learning progress for possible instructional delivery adjustment on the go becomes difficult; and, Faculties supervision and guidance on the go becomes minimal in online classrooms.

The absence of Faculty control over what students do behind the screen provides room for self-deception in learning and irresponsible behaviors that affect students' learning. It was also discovered that students don't get the individual attention they need when classes are online. Those requiring such individual attention are therefore not carried along when the classes are online. As a result, students feel abandoned, unattended to, and uncared for. Students are also developing a feeling that 'covering the course content' seems to be the major concern of Faculties not how well students learn when they hold classes online. Due to these factors, students prefer the hybrid approach over the wholly online class option. This is because in the Hybrid approach design, teaching is face-to-face and in class while learning activities other than teaching are done online. With the design of the Hybrid approach sustaining the in-class teaching activity the referred issues are eliminated.

Effective Faculty presence (control, support, and guidance) plays a key role in students' learning in face-to-face and online learning environments [36,37]. Faculty effort to provide such support, control, and guidance in online learning environments was reported over time in literature as limited [28] and ineffective [38]. Ineffective or low-level faculty presence leads to a feeling of being isolated and dissatisfied [36]. Thus, Faculty presence in online learning environments is not much valued by learners because of its ineffectiveness [39]. Effective Faculty presence manifests itself in two-fold: effective subject content delivery; and effective classroom control and student management. Ineffective Faculty presence in online learning becomes evident during the pandemic [41]. Faculty ineffectiveness in online classes during the pandemic was mostly associated with limited interaction between students and Faculties [28], Faculty's pedagogical approaches, methods of presentation, and assessment used [40].

As a result of many researches suggesting what Faculties can do to improve the effect of their presence in the online teaching-learning environment; Faculty effectiveness in online subject content delivery is reported as being improved by many recent studies [42]. However, effective control and management of students and the learning environment in online classes are still being reported in recent studies as negative and ineffective [43,44]. As consistent with the findings in this study, student's individual learning needs are not well attended to as compared to a conventional classroom setting.

Student Engagement through Faculty Presence and Technology Innovation

Faculty presence is identified in this study as a critical factor that plays a key role in students learning. Students view faculty presence as more strongly felt in class than online during teaching. This is based on their experiences receiving lectures online, in class, and the emerging Hybrid approach (as contextualized in this study) during the 2022/23 academic session. Because of this, the online class option become unpopular. On the contrary, the Hybrid approach is preferred over the online class option because it accommodates faculty-students in-class engagement where faculty presence is strongly felt. In addition, the Hybrid approach in the context of this study allows additional flexible online learning activities with faculty engagement. This feature of the hybrid approach gave it an edge over the other options.

The physical presence of the faculty in the face-to-face classroom makes it a controlled social environment conducive to teaching and learning; and, free of unnecessary noise, distractions, and disturbances that affect learning. The Hybrid approach is appreciated and valued because teaching and learning start in the class considered a conducive learning environment by students because of the faculty's physical presence. The authority and social control faculties exercise to ensure a smooth learning experience during instructional delivery is more effective in class than online based on the student's experience. Students appreciate this because it helps them to concentrate and pay attention to what is presented and discussed in class. Students' concentration in class is higher than online because of the physical presence of the faculty.

The physical presence of the Faculty encourages students to be responsible and maintain self-discipline during lectures. It encourages students to be in their best behavior and put in their best to learn. In a face-to-face class, faculty and students align with the unity of purpose that brings them together and with a sense of responsibility (as applicable to in-class and hybrid approach in this study). Students believe that faculty are more responsible and caring in the class than online. The students appreciate faculties watching over them physically in the classroom to ensure they are learning. The physical presence of the faculty was identified as a key factor that helps to make the faculty-learner interaction a memorable experience. It makes the question-and-answer sessions more productive, interesting, and effective. The highly valued physical presence of faculty in the teaching-learning process as adopted in the hybrid approach takes over 40% of what accounted for the popularity of the hybrid approach among on-campus students.

Reports of previous studies indicating students' preference for the physical presence of faculties over virtual presence differ over time in literature. Most of the studies conducted before the pandemic reported a preference for physical presence over virtual while studies conducted during and after the pandemic reported a preference for both. Preference for physical presence was reported in the work of [2]. On the contrary, [20] reported a preference for virtual presence. This notwithstanding, however, more studies are reporting a preference for physical presence over virtual for varying reasons [45]. Preference for virtual or online preference is associated with flexibility, convenience, and cost-effectiveness. Preference for physical presence on the other hand is associated with understanding of learning content, high-level interaction between faculties and students; and, higher learning outcomes. [46] reported that students preferred the physical class over the online class during the pandemic because they find it difficult to concentrate on e-learning. Another reason provided as reported is 'direct communication with Faculties', [47]; and, 'Better understanding' [8,48]

Innovative use of technology during face-to-face interaction in class; and keeping students engaged with additional learning activities online after the class accounted for about 60% of what makes the hybrid option popular. Face-to-face classroom teaching is no longer what it used to be. It is now technology-driven. Faculties are now using video clips and project images to present learning content; and a variety of game-based activities to test students' understanding. With the new approach, students consider learning in class as more interesting, simplified, activity-oriented, and less abstract. As noted by a participant in the study, "with how faculties use technology in class now learning is less abstract and less strenuous" (P7). "I feel happy and lively in the class as we watch laugh, think, and discuss with the lecturer and as we react to one another as students" (P5). "Instead of receiving lectures online we simply search for additional information to read, analyze, and discuss our findings in the forum while the lecturer sees and drops his comments from time to time" (P7). This indicated that the hybrid approach as experienced by the participant as practiced in the context defined meets the learning needs of students on campus.

4.3. Implication for Practice

Our findings reveal the significance of the hybrid mode of delivery as a balanced approach, addressing many challenges highlighted in the literature regarding face-to-face and online delivery modes. This underscores the practical implications of adopting hybrid teaching methods in educational settings. By embracing hybrid delivery, institutions can mitigate the drawbacks associated with traditional face-to-face or online-only instruction, offering a flexible and adaptable learning environment that caters to diverse student needs. Implementing hybrid models can enhance engagement, facilitate interactive learning experiences, and promote seamless technology integration into teaching practices, fostering a more effective and inclusive educational landscape.

5. Conclusions

Technology-enhanced 'face-to-face' teaching in the classroom complimented by additional learning tasks online monitored by the faculty is the most preferred teaching approach for students on campus after the pandemic. The emerging hybrid approach as defined in the context of this study has the potential to meet the learning needs of students on campus. On the other hand, the online

class option effectively meets the learning needs of off-campus students enrolled in distance and online programs. It is concluded that doing away with the weaknesses of online classes, maximizing the use of technology, and taking full advantage of face-to-face interaction as practiced in the emerging hybrid approach meet the learning needs of students on campus. While this study has shown increasing evidence of students' preference for the emerging hybrid mode of delivery, further study is needed to establish the extent to which the flexibility and adaptability of this hybrid approach enhanced meaningful learning of course material and improved academic performance.

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References

1. Tompkins, P., Williams, M. R., & Pribesh, S. (2019). An examination of late-registering students' success in online and on-campus classes. *Community College Journal of Research and Practice*, 43(5), 370-381. <https://doi.org/10.1080/10668926.2018.1487889>
2. Gherheș, V., Stoian, C. E., Fărcașiu, M. A., & Stanici, M. (2021). E-learning vs. face-to-face learning: Analyzing students' preferences and behaviors. *Sustainability*, 13(8), 4381. <https://doi.org/10.3390/su13084381>
3. Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. <https://vtechworks.lib.vt.edu/server/api/core/bitstreams/a8e51482-265c-457f-9249-4717908b2022/content>
4. Stoian, C. E., Fărcașiu, M. A., Dragomir, G. M., & Gherheș, V. (2022). Transition from online to face-to-face education after COVID-19: The benefits of online education from students' perspective. *Sustainability*, 14(19), 12812. <https://www.mdpi.com/2071-1050/14/19/12812#>
5. Cavanagh, T., Chen, B., Lahcen, R. A. M., & Paradiso, J. R. (2020). Constructing a design framework and pedagogical approach for adaptive learning in higher education: A practitioner's perspective. *International review of research in open and distributed learning*, 21(1), 173-197. <https://doi.org/10.19173/irrodl.v21i1.4557>
6. Devonshire, E., Dodds, S., Costa, D., Denham, R., Fitzgerald, K., & Schneider, C. R. (2022). Educating and engaging a new target audience about the problem of pain for society. *British Journal of Pain*, 16(6), 641-650. <https://doi.org/10.1177/20494637221116560>
7. Bubaš, G., & Čižmešija, A. (2023). Measuring Video Conferencing System Success in Higher Education: Scale Development and Evaluation. *International Journal of Emerging Technologies in Learning (ijET)*, 18(19), 227-254. <https://doi.org/10.3991/ijet.v18i19.42225>. CA: Sage.
8. Lewohl, J. M. (2023). Exploring student perceptions and use of face-to-face classes, technology-enhanced active learning, and online resources. *International Journal of Educational Technology in Higher Education*, 20(1), 48. <https://doi.org/10.1186/s41239-023-00416-3>
9. Kulal, A., & Nayak, A. (2020). A study on perception of teachers and students toward online classes in Dakshina Kannada and Udupi District. *Asian Association of Open Universities Journal*, 15(3), 285-296. <https://www.emerald.com/insight/2414-6994.htm>
10. Wong, K. P., Bonn, G., Tam, C. L., & Wong, C. P. (2018). Preferences for online and/or face-to-face counseling among university students in Malaysia. *Frontiers in Psychology*, 9, 64. <https://doi.org/10.3389/fpsyg.2018.00064>
11. Abd Hamid, I., & Yahaya, W. A. W. (2023). Face-to-Face versus Online Agricultural Courses: An Analysis of Preferences, Challenges, and Non-Adaptability. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(5). <https://doi.org/10.47405/mjssh.v8i5.2328>
12. Lim, K. B., Yeo, S. F., Yeo, X. Y., & Tan, C. L. (2024, January). Exploring Factors that Influence the Continuation of Hybrid Learning in Higher Education. In *4th International Conference on Communication, Language, Education and Social Sciences (CLESS 2023)* (pp. 127-138). Atlantis Press. https://doi.org/10.2991/978-2-38476-196-8_12
13. Haningsih, S., & Rohmi, P. (2022). The pattern of hybrid learning to maintain learning effectiveness at the higher education level post-COVID-19 pandemic. *European Journal of Educational Research*, 11(1), 243-257. <https://doi.org/10.12973/eu-jer.11.1.243>
14. Seong, C. M., Fauzi, M. F., Juhari, S. N., Aliman, N., Rajoo, M., Wahab, N. M. A., & Magiman, M. M. (2022). Blended Learning Practices in Malaysia Higher Education: A Review. *Mathematical Statistician and Engineering Applications*, 71(3), 1637-1652. <https://doi.org/10.17762/msea.v71i3.1497>
15. Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks,

16. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://www.tandfonline.com/doi/abs/10.1191/1478088706QP063OA>
17. Haruna, H. A., Kabara, M. Y., & Enriquez, A. (2022). Face-to-face, online, or hybrid learning in post COVID-19 recovery? Scrutinizing Nigerian Students' Preferences. *Journal of Educational Management and Instruction (JEMIN)*, 2(2), 63-74. <https://doi.org/10.22515/jemin.v2i2.5026>
18. Torio, H., Günther, A., Davila, M. F., & Knipper, M. (2023). Paving the Way for Hybrid Teaching in Higher Education: Lessons from Students' Perceptions and Acceptance of Different Teaching Modes during and after the Pandemic. *Creative Education*, 14(5), 1029-1042. <https://doi.org/10.4236/ce.2023.145066>
19. Baker, L. A., & Spencely, C. (2023). Is hybrid teaching delivering equivalent learning for students in higher education? *Journal of Further and Higher Education*, 47(5), 674-686. <https://doi.org/10.1080/0309877X.2023.2183357>
20. Hotar, N., Özcan, M. A., Baran, B. A. H. A. R., Karagöz, E. M. R. E., & Güney, L. Ö. (2023). Face-to-Face, Online or Hybrid, Which Model is Preferred by University Students And Why?. *Journal of Learning and Teaching in Digital Age*, 8(2), 176-186. <https://doi.org/10.53850/joltida.1125339>
21. Nikolopoulou, K. (2022). Face-to-face, online and hybrid education: University students' opinions and preferences. *Journal of Digital Educational Technology*, 2(2), ep2206. <https://doi.org/10.30935/jdet/12384>
22. Gamage, K. A., Gamage, A., & Dehideniya, S. C. (2022). Online and hybrid teaching and learning: Enhance effective student engagement and experience. *Education Sciences*, 12(10), 651. <https://www.mdpi.com/2227-7102/12/10/651#>
23. Li, X., Odhiambo, F. A., & Ocansey, D. K. W. (2023). The effect of students' online learning experience on their satisfaction during the COVID-19 pandemic: The mediating role of preference. *Frontiers in Psychology*, 14, 1095073. <https://doi.org/10.3389/fpsyg.2023.1095073>
24. Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social sciences & humanities open*, 3(1), 100101. <https://doi.org/10.1016/j.ssaho.2020.100101>
25. Yau, H. K., & Tang, S. T. (2020). Investigation of The Difference Between Online Learning and Face-To-Face Learning on The Aspects of Students' Satisfaction and Preferences: A Study on Hong Kong Higher Education. *Turkish Online Journal of Educational Technology*, 176.
26. Sticklen, J., & Amato-Henderson, S. L. (2021, October). Student preference: ONLINE or face-to-face instruction in a year of COVID-19. In *2021 IEEE Frontiers in Education Conference (FIE)* (pp. 1-6). IEEE. <https://doi.org/10.1109/FIE49875.2021.9637152>
27. Joaquim, I. M., Morolong, M. P., Tundumula, E. T., & Cheng, W. (2023). Preferences and insights of learning process in pandemic era: a case study of South Africa. *Higher Education, Skills and Work-Based Learning*, 13(4), 800-812.
28. Mali, D., & Lim, H. (2021). How do students perceive face-to-face/blended learning as a result of the Covid-19 pandemic?. *The International Journal of Management Education*, 19(3), 100552. <https://doi.org/10.1016/j.ijme.2021.100552>
29. Ustun, A. G., Kursun, E., & Kayaduman, H. (2024). How Do Higher Education Institutions Offer Online Courses For On-Campus Students? Pull And Push Factors Influencing their Decisions. *Turkish Online Journal of Distance Education*, 25(1), 95-117. <https://doi.org/10.17718/tojde.1175726>
30. Janmaimool, P., & Nunsunanon, S. (2021). Online vs. face-to-face lecture courses: Factors impacting the effectiveness of online learning. <https://doi.org/10.20944/preprints202107.0306.v1>
31. He, J., Zhao, H., & Jiang, F. (2022). Analysis of the Status and Influencing Factors of Online Learning. *Canadian Journal of Learning and Technology*, 48(4), 1-19. <https://doi.org/10.21432/cjlt28246>
32. Realyvásquez-Vargas, A., Maldonado-Macias, A. A., Arredondo-Soto, K. C., Baez-Lopez, Y., Carrillo-Gutiérrez, T., & Hernández-Escobedo, G. (2020). The impact of environmental factors on academic performance of university students taking online classes during the COVID-19 Pandemic in Mexico. *Sustainability*, 12(21), 9194. <https://www.mdpi.com/2071-1050/12/21/9194#>
33. Blasiman, R. N., Larabee, D., & Fabry, D. (2018). Distracted students: A comparison of multiple types of distractions on learning in online lectures. *Scholarship of Teaching and Learning in Psychology*, 4(4), 222. <https://psycnet.apa.org/doi/10.1037/stl0000122>
34. Wang, C. (2022). Comprehensively summarizing what distracts students from online learning: A literature review. *Human Behavior and Emerging Technologies*, 2022. <https://doi.org/10.1155/2022/1483531>
35. Attree, K. (2021). On-campus students moving online during COVID-19 University closures: Barriers and enablers.'A practice report'. *Student Success*, 12(3), 106-112. <https://doi.org/10.5204/ssj.1780>
36. Shannon, C., & Clarke, D. (2022). How teacher presence engages and supports online female postgraduate students. *ASCILITE Publications*, e22098-e22098. <https://doi.org/10.14742/apubs.2022.98>
37. Greaves, D. (2024). Perception of young adults in higher education: a case study of Caribbean students in the online learning environment. *Open Learning: The Journal of Open, Distance and e-Learning*, 39(1), 68-84. <https://doi.org/10.1080/02680513.2021.1906640>

38. Chiodaroli, M., Freyhult, L., Solders, A., Tarrío, D., & Günter, K. P. (2024). "Every morning I take two steps to my desk...": students' perspectives on distance learning during the COVID-19 pandemic. *Higher Education*, 1-20. <https://doi.org/10.1007/s10734-023-01179-6>
39. Chang, N. (2018). The vital importance of faculty presence in an online learning environment. In *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 2661-2671). IGI Global. DOI: 10.4018/978-1-5225-2255-3.ch232
40. Tukan, F. M. E. (2020). Challenges and strategies using application in online teaching during pandemic. *English Education: English Journal for Teaching and Learning*, 8(2), 138-154. <https://jurnal.iain-padangsidempuan.ac.id/index.php/EEJ/article/view/3236/235>
41. Richards, K., & Thompson, B. M. W. (2023). Challenges and Instructor Strategies for Transitioning to Online Learning During and After the COVID-19 Pandemic: A Review of Literature. <https://doi.org/10.3389/fcomm.2023.1260421>
42. Prestridge, S., Main, K., & Schmid, M. (2024). Identifying how classroom teachers develop presence online: breaking the fourth wall in online learning. *Education and Information Technologies*, 29(2), 1357-1377. <https://doi.org/10.1007/s10639-023-11714-8>
43. Rofi'i, A., Herdiawan, R. D., & Rosidah, A. (2023). Student's Perception on Classroom Management During Online Learning. *Jurnal Educatio FKIP UNMA*, 9(2), 993-1000. <https://doi.org/10.31949/educatio.v9i2.4502>
44. Zhao, Y., Mohd Yusof, S., & Hou, M. (2024). "Why are These Problems Still Unresolved?" Those Pending Problems, and Neglected Contradictions in Online Classroom in the Post-COVID-19 Era. *Open Education Studies*, 6(1), 20220212. <https://doi.org/10.1515/edu-2022-0212>
45. Raes, A. (2022). Exploring student and teacher experiences in hybrid learning environments: Does presence matter?. *Postdigital Science and Education*, 4(1), 138-159. <https://doi.org/10.1007/s42438-021-00274-0>
46. Sevy-Biloon, J. (2021). Virtual or Face to Face Classes: Ecuadorian University Students' Perceptions during the Pandemic. *English Language Teaching Educational Journal*, 4(1), 15-24. <https://files.eric.ed.gov/fulltext/EJ1296457.pdf>
47. Costado Dios, M. T., & Piñero Charlo, J. C. (2021). Face-to-face vs. E-learning models in the covid-19 era: Survey research in a Spanish university. *Education Sciences*, 11(6), 293 <https://www.mdpi.com/2227-7102/11/6/293#>
48. FERSAOU, I. (2021). Comparative Observations on Face-to-Face Instruction Versus e-Learning: EFL Students' Representations. *DIDACTIQUES*, 10, 01-95. <https://www.asjp.cerist.dz/en/PresentationRevue/300>

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