Teachers' Readiness Level for the Implementation of Hyflex Instructional Modality

Eunice S. Villegas¹, Krisha Angela A. Omayao², Joel D. Potane³ ¹⁻³ Graduate School, Capitol University ,Cagayan de Oro City, Philippines

Abstract:- This study offers significant results on the survey of teachers' readiness toward the implementation of the hybrid flexible instruction (HyFlex mode of teaching)) from the faculty members at one of the community colleges in Misamis Oriental. Proportionate stratified random sampling was utilized to collect data. There were 100 full-time faculty members chosen to be a respondent and took part to answer the questionnaire. Based on the survey, teachers rated their readiness level to engage in the implementation of the HyFlex Mode of Teaching, pedagogical strategies with the integration of technology, and teaching approach while adopting social media platforms or online tools. The study employed a survey research design. In analyzing the data, descriptive statistics was used to examine the level of teachers' readiness for the implementation of the Hyflex modality. The findings showed that the faculty members felt ready to use digital platforms as a teaching tool while effectively engaging in HyFlex instructional modality. However, they affirmed being unpremeditated with the complexities of applying various pedagogical strategies via an online approach, which resulted in a 'moderate ready' level of readiness. Limited resources and training led to low-quality instruction. Generally, the teachers' readiness level results manifested as "low" based on the adjectival rating scale. So, substantial resources and abetment are required for those unfamiliar with the instructional modality before fully adopting the HyFlex instructional modality.

Keywords: Hyflex Instructional Modality, Pedagogical Strategies, Survey Research, Teachers' Readiness, Technology-Oriented.

I. INTRODUCTION

Nowadays, hybrid flexible instruction has emerged as a significant and new educational trend in many colleges and universities in global and local paradigm shifts. This approach may aid students and teachers in reducing the limitations of each learning environment to achieve the effectiveness of learning by adopting online and face-to-face instruction. In order to pique students' attention and motivate them to become more engaged and adept learners, instructors might make use of online learning tools and substantial digital resources. Over recent decades, teaching instructions have eventually developed into advanced and technological approaches. In fact, it is become essential to promote productive and innovative ways of transforming knowledge and skills in which students can explore beyond what is expected from them. It helps them to learn independently, boosts self-esteem to discover ideas, and unravels perplexities on complex concepts. This will also help instructors to serve the students well.

Hybrid-Flexible (HyFlex) Teaching and Learning Design:

Originally, HyFlex teaching and learning was developed by Dr. Brian Beatty (Beatty, 2014). He defines HyFlex as a course that enables a flexible participation policy for students. Students may choose to complete course learning activities online without physically attending class or face-to-face synchronous class sessions. The word Hyflex is derived from "hybrid learning" with "flexible approach". Flexibility has something to do with the students having the opportunities to engage in course material and participate in activities that work best for them. The methods of HyFlex teaching differ from four modalities: blended learning, faceto-face, hybrid, and online, (Beatty, 2019). These modalities are described: blended learning (both the instructor and the students are physically present in the same classroom while integrating teaching strategies with technology); face-toface (learning happens in the classroom when the instructor and the students interact in propria persona); hybrid (the lecturer and the students sometimes meet face-to-face and at certain times work and engage online, Raes, et al., (2020); and online (this mode allows for the possibility of synchronous or asynchronous teaching and learning without the need for a shared physical area). Thus, the terms "hybrid" and "flexible" are combined in " HyFlex teaching and learning," which offers students a more flexible learning environment.

The HyFlex learning model relates per se to the essence of combining traditional face-to-face instruction with additional distance learning techniques, and by combining independent knowledge and collaborative activities with the use of a variety of e-materials, technology, and, or social media sites.

Additionally, instruction type (experience), delivery method (medium), instructional location, and synchronicity, is the key to understanding the difference between hybrid or blended delivery (Margulieux, et al., 2014). Abdelmalak, Kharga, and Parra, (2016) stress that HyFlex has the concept of blended learning, but provides a more flexible

environment. HyFlex courses are geared toward improving adult students' educational opportunities by providing convenience, flexibility, and access, (Beatty, 2007; Abdelmalak & Parra, 2016; Miller, Risser, & Griffiths, 2013).

Few of the researchers posited that these modes had increased the use of well-established online practices such as the utilization of learning management systems for instruction while also encouraging the use of synchronous lessons delivered via online meeting software to make sure that e-learning could perdure. The shift to online teaching modes has changed how nearly all students interact with course content, classmates, and teachers. Bawane & Spector (2009) argue that the competencies required to teach online are not substantially different from those needed to teach face-to-face; it is assumed that the faculty member's past teaching experience serves as a foundation for teaching online. However, several academics dispute this assumption, stating that there are differences between teaching in the classroom and online, as well as between the roles of the online faculty member and the faculty member teaching in the classroom (Ko & Rossen, 2017; Wray et al., 2008). Online instructors place a strong emphasis on the capacity to engage students virtually through communication, virtual management strategies, and instructional time and space. Despite the fact that many researchers have sought into how this kind of instruction is implemented (Bell et al., 2014; Chakraborty & Victor, 2004; Moore et al., 2017; Park & Bonk, 2007; Popov, 2009; Roseth et al., 2013; Ryu & Boggs, 2016; Stewart et al., 2011; Szeto, 2015) limited research exists on assessing the level of faculty readiness for HyFlex teaching and learning as stated in the study of Martin et al., (2019).

> Theoretical Approach:

The HyFlex mode of teaching and learning allows teachers to decide what students should learn, how students are taught, and when the teaching and learning process commences. Students also work with the activities independently and motivating them to experience a collaborative and innovative approach to learning. Theoretically, HyFlex learning is embedded in Knowles' Adult Learning Theory - Andragogy. The term andragogy was described by Knowles (1980) as an art and science of adult learning, (Kearsley, 2010). In the study of Chan (2010), this term was coined by Kapp, A. (1833) a German educationalist, however, the concept wasn't widely accepted until Eduard C. Lindeman expanded on it in 1926 (Gessner, 1956; Ozuah, 2005). Knowles produced five (5) assumptions of the characteristics of adult learners: selfconcept (dependent personality to self-directed human being); adult learner experience (accumulates experiences to become a resource for learning); readiness to learn (focused on the developmental tasks of social roles); orientation to learning (perspective of learning shifts from subjectcenteredness to problem centeredness); and motivation to learn (internal), (Smith, 2002).

Adult learners are problem-oriented, internally motivated, self-directed, and independent learners,

(Merriam, et al., 2007 cited in Chan, 2010). HyFlex mode of teaching and learning permits students to perform these characteristics which prepared them to become adult learners in transmitting knowledge and skills independently and offers them to maximize learning capabilities with the integration of technology both face-to-face and online approaches. The pace of development of adult education has altered its position within the educational system. Adults have to develop their skills to fit within their own anthroposphere. So, there is a necessity for an instructional approach that gives into account of adult learning needs. The said andragogical method is a well-lauded answer to these demands.

As cited in the study of Chan (2010), Forrest & Peterson (2006) claim that the andragogical approach is essential in management education to help prepare students for their working environment. Through andragogical principles, the instructor may adapt the training to meet student interest by involving the them in the creation of learning objectives and activities as well as solving realworld business problems. Andragogy enhances communication between the student and the instructor as they collaborate to create educational materials and delivery strategies that are tailored to the requirements of the students. Thus, the guiding principles encourage studentteacher trust and raise students' self-awareness.

In order to strike an ideal balance of practical experience and theoretical approach between students' and teachers' interaction in the teaching and learning process, various standpoint of the HyFlex mode of delivery instruction in schools must be taken into consideration. Moore, Dickson-Deane, and Galyen (2011) stated that defining online learning has been both difficult and controversial. The terms hybrid and blended have become buzzwords in corporate America and higher education settings. However, there is still a bit of ambiguity about the details of each term (Graham, 2006), as cited in the study of Keiper, et al., (2021).

> The implication of Hyflex Instructional Modality for Universities and Colleges:

HyFlex instruction modality has actively performed in higher education, which became massively used during the resurgence of the *COVID-19 pandemic*. This global pestilence brought tremendous impact on the economic, educational, personal, and professional growth, business and livelihood, and moral aspects. Thus, to decelerate the spread of the virus and its variants, teachers in higher education institutions significantly adopt hybrid flexible learning to cater to the needs of the students and to maximize their learning capabilities. Thus, adult learning has been substantially enhanced by both teachers and students in higher education in adopting HyFlex mode of instruction.

In the Philippines, local colleges and universities momentarily adopt the mandated guidelines on implementing flexible learning and its reopening and conducting the limited face-to-face classes as purported in the CHED-DOH Joint Memorandum Circular No. 2021-001

series of 2021. Thus, in full force, schools should allow students to apply and adopt the said implementation, particularly those who enrolled in courses with technical subjects. In such a way, school campuses urgently retrofitted laboratories, classrooms, and other school plant facilities. Besides, teachers are also expected to prepare themselves for the urgent implementation of flexible learning. This herculean challenge allows teachers to continue teaching beyond usual face-to-face instruction.

Locally, the hyflex mode of teaching has been implemented in the school for the second semester of Academic Year 2021-2022. Hence, the Commission on Higher Education mandated all higher education institutions to conduct limited face-to-face classes in all programs as stated in the CHED-DOH Joint Memorandum Circular No. 2021-004 on the "Guidelines on the Implementation of Limited Face-to-Face Classes for all Programs of Higher Education Institutions (HEIs) in Areas Alert Levels Systems for COVID-19 Response". Under this guideline, schools are encouraged to establish a Cyclical Student Shifting System which means the number of students present on the campus on a given day is limited. Consequently, it pertains that there was also a limited face-to-face delivery of instruction.

In lieu of this information, the local community college likewise mandated that the face-to-face session of classes should also be limited. Thus, the following shifting system confirmed those teachers who handled technical courses were given three (3) shifts of schedules to conduct actual classes: 'once a week', 'once a month', and 'twice a month'. In this system, the institution formally termed this a Cyclical Implementation Plan for the teachers to choose their schedule to conduct the limited face-to-face classes.

This paradigm shift needs collaboration between and among stakeholders in the institution across different situations; pace, time, and place to easily deliver the learning instruction, and to respond to the student's needs to access quality education and high performance on the level of proficiency. However, there are also huge gaps among teachers on their readiness to implement various teaching strategies through synchronous discussion, online activities, and assessment towards the implementation of the HyFlex mode of teaching since the school just started to adopt the mandated guidelines of the Commission on Higher Education relative to the gradual opening of the limited face-to-face classes. Teachers must provide evidence of learning objectives, adhere to the course outcomes, and submit the complete pack of modules to keep systematic records concretely presented.

The local community college is gradually implementing hybrid learning; consequently, those teachers who are handling technical subjects are encouraged to design instructional materials and teaching pedagogies in order to achieve the core competencies set in the curriculum. Mokhothu (2015) defined technology subjects as a new term for integrated topics that were formerly known as "Technical subjects". Hence, the Department of Education, (2002b) agreed that technology is described as the use of information, skills, and resources to meet human needs and desires by developing practical solutions to problems while also taking social and environmental considerations into account as cited in the study of Mokhothu (2015). Teachers generally can utilize a concrete classroom setting and laboratories where students can engage in various competencies and learning assessments through practical experiences. Hence, practical engagement in teaching and learning might be of paramount virtue to achieve greater heights in the students' success to be proficient and skilled enough in their chosen field. Thus, it is significantly needed to examine the teachers' readiness for the implementation of HyFlex learning in order to continue inculcating the minds of the students with both practical and theoretical experiences amidst the resurgence of the pandemic.

Nevertheless, the researchers of this study focused on one of the local community colleges of Misamis Oriental to look into the teachers' readiness level for the implementation of the HyFlex instruction modality. That, readiness has to do with teachers' awareness, knowledge of use, perceptions, and attitudes toward their capabilities and skills for technology integration as gaining experience in the use of educational technology (Msila, 2015). Technical and pedagogical preparedness are the two elements of technological readiness that researchers have discovered. These elements are seen to be essential for the success of any technological breakthrough in education (Ng, 2011) and they have been scrutinized through the categories of skills, knowledge, habits, and attitudes (Bonanno, 2011; Ngah, et al., 2010) as cited in the study of Al-Awidi, & Aldhafeeri, (2017).

> Purpose of the Study and Research Questions:

Furthermore, this study aimed to find out the quantitative and qualitative description with regard to the schedule of teachers' face-to-face teaching based on the implementation plan cycle, mode of delivery, distance teaching tools; level of teachers' teaching engagements, and their level of perception towards readiness on the implementation of HyFlex mode of teaching to see to it whether the teachers are fully engaged with various strategies and adopt the use of technology-oriented approach amidst the pandemic.

- What HyFlex mode of teaching did the teachers implement in terms of:
- ✓ cyclical implementation plan;
- ✓ mode of delivery; and
- ✓ distance teaching tools?
- What pedagogical strategies did the teachers engage in the implementation of HyFlex instructional modality?
- What were the teachers' perceptions of their readiness towards teaching using HyFlex instructional modality in terms of:
- \checkmark teaching approach; and
- ✓ technology-oriented?

II. METHODOLOGY

Research Design:

This study utilized a survey research design. Survey designs are procedures in quantitative research that involve giving a survey or questionnaire to a small group of people (referred to as the sample) in order to find trends in the attitudes, opinions, behaviors, or characteristics of a larger group of people (Creswell (2012). The purpose of the design is to obtain the level of teachers' readiness toward the implementation of the hyflex mode of teaching and the level of teachers' engagement in different pedagogical strategies. Thus, the researchers used quantitative and qualitative data analysis to obtain the objectives of the study.

Sampling and Participants of the Study:

The selection of the respondents was based on proportionate stratified random sampling. This technique emphasized that the more the population of the department, the more teachers are obtained in the selection. The respondents of the study were the teaching personnel of a local community college who came from various courses offered in the school during the second semester of the Academic Year 2021-2022. There were 100 total participants in the conduct of the study.

> Procedure and Ethical Considerations:

The researchers asked permission from the office of the College President and Vice-President for Academic Affairs to conduct the study. After the approval, the researchers proceeded to College Deans to submit the permission letter in order to gather data from the respondents. After approval from the administrators, the instrument was sent through Google Forms. Attached also in the Google form is the consent form from the respondents to keep the confidentiality of the information gathered. After the data was collected, the results were generated through SPSS to discuss the findings and interpretations.

> Instrument:

The researchers used a self-made Survey Questionnaire to gather relevant information and data from the respondents. The questionnaire provides closed-ended questions, particularly on the quantitative dimension of the data gathering procedure. In gathering the data, the 4-point Likert Scale for Frequency (always (4), often (3), sometimes (2), never (1) was used to gather data in problems 1 & 2, and the 4-point Likert Scale for Agreement (strongly agree (4), agree (3), disagree (2), strongly disagree (1) in problem 3. This research instrument was utilized through a google form. According to Blankers et al., (2012), as cited in the study of Seman, et al., 2021 that the use of online surveys facilitates the collection of data findings because the respondents involved can be contacted saves cost, time, and energy.

Data Analysis and Statistical Tool:

To establish the reliability of the questionnaires, the researchers went through a pilot test of the instrument. Cronbach's alpha was used to show the internal consistency or reliability of the participant's responses to the questionnaires. This technique was used to determine the reliability of the survey. It was found that Cronbach's Alpha for *Digital Platforms/Tools* = .704 > .5, for *Teaching Strategies Applied* = .702 > .5, for the *Teaching Approach on Hyflex Mode of Instruction* = .705 > .5, and for the *Technology-Oriented on Hyflex Mode of Instruction* = .733 > .5 respectively. George & Mallery (2003) purported that if the value found falls within the accepted levels from 0.5 and above, the questionnaires were reliable. Thus, the results indicated that the ten items used for *digital platforms/tools, teaching strategies, teaching approach*, and eight items used for *technology-oriented* were reliable.

The data were analyzed using descriptive statistics (means, standard deviations, and percentiles) to examine the levels of teachers' readiness based on the mean scores of teachers' responses to the survey. In describing the mean level in terms of frequency, the classification was adopted based on the study of Tuan (2017) which presented: 1.00 to 1.74 -Never, 1.75 to 2.49 -Sometimes, 2.50 to 3.34 -Often, 3.35 to 4.00 -Always. This scale was mainly used in gathering the data based on digital platforms/tools, and teachers' engagement in the teaching and learning process.

To describe the mean level in terms of teachers' perception of the implementation of hyflex instructional modality, the researchers then used this scale: 1.00 to 1.74 - Not Ready, 1.75 to 2.49 - Moderately Ready, 2.50 to 3.34 - Ready, 3.35 to 4.00 - Very Ready. This scale was mainly used in the interpretation of problem no. 3.

The average means were classified into four levels: 3.35 - 4.00 indicates a very high level of readiness, 2.50 to 3.34 tells a high level of readiness, 1.75 to 2.49 – shows a low level, and 1.00 to 1.74 – shows a very low level of readiness. This level of interpretation was also adapted from the study of Tuan (2017).

Statistical Package for Social Science (SPSS) via *IBM* SPSS Statistics 20 Licensing – used in calculating the mean and the standard deviation results of the teachers' various engagements in adopting the hyflex modality.

III. RESULTS AND DISCUSSIONS

The purpose of this paper is to discuss the teachers' readiness level for the implementation of HyFlex instructional modality. The interpretation of data consists of the **HyFlex mode of instruction**: schedule of teacher's face-to-face teaching based on the implementation plan cycle, mode of delivery, and distance teaching tools; **level of teacher's teaching engagements** (*digital platforms/teaching tools being used and the application of various teaching pedagogies*); and **their level of perception towards readiness** (*teaching approach and integration of technology*).

The categories presented in Table 1 were based on the schools' policies and guidelines on the implementation of face-to-face classes. The cyclical implementation plan is part of the major guidelines in the teaching faculty,

particularly those who handle technical subjects who are opted to conduct face-to-face classes or the synchronous inperson mode of instruction. For example, a HyFlex 'once a week' – denotes that the teachers may have one session of onlinesynchronous for lecture-based lessons and one session of face-to-face class for practical experiences. Thus, the table below surveyed only the face-to-face classes of both teachers andstudents.

Based on the survey, 60% of the population chose 'not adapted' – this implies teachers were not consistent with their schedule or not fully adapted to the HyFlex mode of instruction during their classes. 'Twice a month' was next to be selected which shows 19% of them, and the least selectedwas 'once a month' which has 7% only.

This implies that most teachers were using the asynchronous teaching mode in which meeting actual classes in the classroom setting is not their top priority. Only a few of the participants selected the categories of schedule of face-to-face classes. It means that this number of teaching personnel were handling technical subjects offered for the second semester since they are required to do so. A concern about HyFlex in previous studies is in regard to attendance. One study found that some students never attended the class or did not listen to the lectures online (Abdelmalak et al., 2016).

Thus, all tertiary teachers are encouraged to adopt the hyflex mode to see whether the students are focusing on the lecture or not. In addition, in the classroom setting, teachers can easily observe, evaluate, and assess student's performance in conducting differentiated activities rather than online synchronous classes. It is because the online synchronous classes have a lot of occurrences may happen that could distract the concentration of both students and teachers during the teaching and learning process, that is mostly inconsistency of internet availability, technical problems, and lack of knowledge in using the features of platforms/applications or any means of communication.

Table 1 Schedule of Teacher's H	yflex Mode of Teaching	g Based on the Cyclical Im	plementation Plan
			•

CATEGORY	FREQUENCY (N=100)	PERCENTAGE (%)						
Once a Week	14	14						
Once a Month	7	7						
Twice a Month	19	19						
Not Adapted	60	60						
Total	100	100						

The mode of delivery presented by the researchers clearly adopted the idea of Dr. Brian Beatty on defining the HyFlex mode of teaching in flexible learning that students may choose to complete course learning activities online without physically attending class and they may participate face-to-face synchronous class sessions, (Beatty, 2019).

Both synchronous online and HyFlex modes had similar results with 40% of the population size. The remaining 20% was asynchronous online which implies that some of the teachers utilized the modules and other instructional learning resources so that the students could have their own pace of studying and learning the lesson objectives.

Faculty members believe they are prepared to engage in HyFlex instruction competencies similar to those required for other instructional formats such as in-person instruction. For example, instructors are prepared to communicate course goals and progress and make students feel at ease in the instructional environment. However, they admitted to being less prepared to deal with the complexities of the HyFlex modality. These complexities entail equally managing students in two settings (in-person and online). Teachers appear less prepared in both settings to synchronize content and their attention with learners.

Table 2 Mode of Delivery

INFORMATION	CATEGORY	REQUENCY(N=100)	PERCENTAGE(%)
Teaching Modality Mostly Adapted	Synchronous Online	40	40
	Asynchronous Online	20	20
	Hyflex	40	40
Total		100	100

Using a checklist questionnaire, teachers were asked to state which resources or digital platforms they usually used to successfully implement HyFlex learning opportunities at their institution as shown in Table 3. Analysis of responses (n=100) to these questions revealed that an array of resources was deemed necessary. It is gleaned from the data that most of the teachers frequently used these digital teaching platforms 'Google forms/classroom/meet, and Facebook page/Messenger' has the highest mean rating of 3.88 which is described as "always". Some of them often mentioned that these resources could be primarily used in both synchronous and asynchronous modes of delivery. In technical support, the adjectival rating of "**always**" was the use of '*laptop/personal computer*'. This means that the teachers are likely utilized this tool as a convenience to navigate digital platform features particularly when using google meet and google classroom.

On the other hand, sending additional resources, activities, and announcements were used through '*emails*' (\bar{x}

=2.81, σ =.861) which were described as "often", with that, the same description emphasized with the tool was via 'mobile phone' ($\bar{x} = 2.99, \sigma = .482$).

Digital platforms like 'Zoom, TikTok. and Youtube/Online Videos' were labeled as "sometimes" with the highest mean rating of 2.29, and its standard deviation was .656 respectively.

The least frequent usage of the digital platform was 'Moodle' with a mean of 1.02 and a standard deviation of .141 which is defined as "never".

The results of the responses to the checklist question also drew attention to the fact that many participants lack knowledge with regard to the full implementation of HyFlex teaching and could not narrow down resources. For example, some participants stated the following when asked which resources they felt were needed to successfully implement HyFlex learning opportunities at their institution: "I don't know what I would need as my experience is limited" and "don't know enough about it to answer." A few

respondents felt that they did not need any additional resources to successfully implement HyFlex learning opportunities at their institution. One faculty member responded: "None beyond what I already have."

Digital material supports the delivery of the curriculum and aids in the attainment of educational objectives. Any type of digital media that has been produced in an opensource environment and is constantly available to students. Digital media is a piece of information that is stored digitally and accessible through a variety of channels, such as free web content, digital devices, and paid subscription. It comprises elements that may be utilized to construct and distribute digital curriculum, including as text, images, audio, video, internet applications, and other elements (Tatnall, et al., 2011).

Using a variety of digital tools, including mobile phones, desktop computers, smartboards, laptops, and digital cameras, digital technology enables students and instructors to connect with the curriculum (Purcell, Buchanan, & Friedrich. 2013).

PLATFORMS/TOOLS	MEAN	STANDARD DEVIATION	DESCRIPTION
Google (classroom, sites, forms, etc.)	3.4	.492	Always
Moodle	1.02	.141	Never
Zoom	1.75	.783	Sometimes
Google Meet	3.65	.479	Always
e-mails	2.81	.861	Often
Tiktok	1.78	.773	Sometimes
Facebook Page/Messenger	3.88	.383	Always
Youtube/ Online Videos	2.29	.656	Sometimes
Mobile Phone	2.99	.482	Often
Laptop/PC	3.64	.542	Always
GENERAL WEIGHTED MEAN	2.72	.559	Often

Table 3 Digital Platforms/Teaching Tools Mostly Us	ed
--	----

ADJECTIVAL DESCRIPTION (Tuan, 2017)

1.0 - 1.74 – Never, 1.75 - 2.49 – Sometimes, 2.50 - 3.34 - Often, 3.35 - 4.00 -Always

Teachers were very insightful regarding resources and support, identifying many assets, materials, supplies, measures, and staff that could assist them as they considered how to implement HyFlex instruction in their specific contexts. Many of the resources and support mentioned would address some of the major issues that have previously prevented adequate implementation of the instruction: nonverbal communication in class (Stewart et al., 2011), poor communication between students and teachers, and inequalities that favor online learners over in-person learners or vice versa (Popov, 2009; Moore et al., 2017). Given the participants' limited knowledge of the hyflex modality, the resources and support listed would also serve to provide feedback and ensure the highest quality of instruction.

Table 4 shows the most common pedagogical strategies used in the teaching and learning process. As presented in the table, the results of this group of items have lesser attention on the utilization of various strategies which were generally indicated as occasional in terms of frequency. As the data revealed, 'learner-centered strategies, interactive lecture- demonstration, and teacherled discussion' were mostly used by the teachers, described as "always" with the highest mean rating of 3.45, and its standard deviation was .575 accordingly. This group of strategies always aids in establishing the learning goals towards the students' skills, particularly those competencies needed to attain actual presentation such as reporting, small group discussion, product demonstration, etc. The paper of Hammond et al., (2020) is an investigation of the nature and the value of asynchronous online discussion within small groups of learners. The paper goes on to argue that there is a particular educational value in a communicative approach to an online discussion that draws both on knowledge gained from practical experience and theoretical insight.

Only one category to the "often" description was the 'random calling' strategy which showed a mean of 2.76, and a standard deviation of .933, this strategy implies that the teachers allow students to think through an answer based on the given questions during the class. Of course, the teacher must give enough time to the students to think critically so that they may be able to draw or create answers and express ideas relative to the given questions.

The teaching pedagogies that were described as "sometimes" were 'invention strategies, simulation activities, peer review writing, and concept mapping, note-taking, drawing'. The initialpart has the highest rating among this group which is shown with the weighted mean of 2.42, and its standard deviation was .794. Based on this result, respondents claimed that the Invention Activities were occasionally practiced by the students to make predictions whenever they throw questions before learning about the answer.

The results also divulged that the 'Computer Simulations or Games, and Problem-Based Learning' were the least commonly used in teaching strategies in various delivery modes The results were described as "never" with the mean of 1.66 and 1.38 which means only a few of the respondents were using online gamification like Kahoot, Quizziz, Brainscape, etc., and solving complex problems such as case studies, research proposals, and other challenging levels of learning activities.

Table 4 Pedagogical Strategies Mostly Applied in the Teaching and Learning Process					
TEACHING STRATEGIES	MEAN	SD	DESCRIPTION		
Simulation Activities (dyad, brainstorming, debate, role-play, etc.)	2.38	0.528	Sometimes		
Learner-Centered Strategies (small group discussion, reporting, journal			Almone		
reflective writing, etc.)	3.41	0.753	Always		
Invention Activities (students make predictions or attempt to answer			Sometimes		
questionsbefore learning about the answer)	2.42	0.794	Sometimes		
Computer Simulations and or Games	1.66	0.934	Never		
(Videos, Kahoot, Quizziz, Brainscape, etc.)					
Random Calling (allow students to think through an answer based on the					
given questionsduring the class)	2.76	0.933	Often		
Peer Review Writing (students evaluate eachother's writing using a	1.54	0.688	Never		
provided rubric)					
Problem-Based Learning (students work ingroups to solve complex,					
realistic problems, researching, Case Studies, etc.)	1.38	0.488	Never		
Interactive Lecture Demonstration	3.45	0.575	Always		
Concept Mapping, Note-taking, Drawing	2.34	0.781	Sometimes		
Teacher-Led Class Discussion	3.34	0.536	Often		
GENERAL WEIGHTED MEAN	2.47	0.701	Sometimes		

ADJECTIVAL DESCRIPTION (Tuan, 2017)

1.0 - 1.74 - Never, 1.75 - 2.49 - Sometimes, 2.50 - 3.34 - Often, 3.35 - 4.00 - Always

According to the responses obtained from the respondents, there were benefits mentioned by the teachers after implementing the aforementioned strategies in the classroom. The study's findings highlight the variety of pedagogical approaches that instructors consider when designing their HyFlex classrooms. Some faculty members considered traditional asynchronous methods of engaging with students online, such as the use of a Learning Management System (LMS), but others deemed innovative approaches that would allow for synchronous collaboration, communication, and active learning through inquiry-based approaches, virtual surveys, and video sessions. These approaches are similar to the existing literature (Roseth et al., 2013; Bell et al., 2014). Based on the pedagogical approaches shared, it can also be deduced that faculty members considered strategies to engage learners outside of a specific class session in an asynchronous format using discussion boards and prerecorded videos. Some of these pedagogical approaches were covered in the literature and implemented by faculty members who had previously designed and used HyFlex instruction, with the goal of: a) creating a balance of didactic approaches, and b) making learners in both settings feel included (Wang et al., 2017).

Teachers were asked to assess their readiness for teaching using HyFlex learning experiences in terms of their teaching approach by reflecting on and evaluating ten competency statements presented in the survey. The rating used to assess their level of preparedness was the following: "Very Ready," "Ready," "Moderately Ready" or "Not Ready." The results of the survey indicated that most of the faculty members felt they were "ready" to 1) 'achieve mastery of the teaching and learning in a synchronous online environment by becoming familiar with all materials, tools, and organization of the course environment', 2) provide detailed feedback on assignments and exams, in a synchronous online format, through facilitation, guidance, directed learning, and progress assessment, 3) communicate as needed with in-person and online, 4) Encourage a safe, inviting, and respectful environment by promoting netiquette guidelines, 5) communicate course goals and outcomes, 6) use features in the learning management system'.

Additionally, teachers felt "moderately ready" to 'respond to in-person and online students' inquiries via email or phone within 12 - 24 hours to guide students towards a positive learning outcome', to 'design learning activities, to 'use different teaching methods in an online environment, and to create online course orientation and instructional videos.

The results were generally described as **"moderately ready"** which implies that most of the teachers are on the average level in adapting the teaching approaches while using various modes of teaching.

Table 5 Teacher's Perception of their Readiness Towards Teaching Using HyflexInstructional Modal	lity
in Terms of Teaching Approach	

TEACHING APPROACH	MEAN	SD	DESCRIPTION
Achieve mastery of the teaching and learning in a synchronous online			
environment by becoming familiar with all materials, tools, and organization of	3.13	0.800	Ready
the course environment			
Respond to in-person and online students' inquiries			
via email or phone within $12 - 24$ hours to guidestudents towards a positive	2.13	0.630	Moderately Ready
learning outcome.			
Provide detailed feedback on assignments and exams, in a synchronous online			
format, through facilitation, guidance, directed learning, and progress	2.75	0.833	Ready
assessment			
Communicate as needed with in-person and online			
students about course progress and changes viaemail, course announcements, etc.	2.64	0.772	Ready
Encourage a safe, inviting, and the mutually respectful synchronous online			
environment by communicating with students in a positive tone and by promoting	3.04	0.243	Ready
Netiquette guidelines			
Communicate course goals and outcomes using the			
syllabus and course announcements at the beginning of the course for both in-	2.71	0.591	Ready
person and online students			
Design learning activities that provide studentsopportunities for interaction	1.94	0.468	Moderately Ready
Use different teaching methods in an online environment and create online tests,	2.41	0.900	Moderately Ready
quizzes, etc.			
Use features in learning management system in orderto manage time (e.g., online			
grading, rubrics, school	2.36	0.811	Ready
calendar, etc.)			
Create online course orientation, instructionalvideos/lecture videos for the	1.78	0.586	Moderately Ready
students			
GENERAL WEIGHTED MEAN	2.49	0.664	Moderately Ready

1.0 - 1.74 -Not Ready, 1.75 - 2.49 - Moderately Ready, 2.50 - 3.34 - Ready, 3.35 - 4.00 - Very Ready

Table 6 manifested the overall participants did not respond "I am not ready" to any of the competency statements regarding their readiness towards the integration of technology in teaching using HyFlex mode of delivery. As a result, participants received a mean score of 2.27 for all competencies, indicating that they were not so prepared to implement HyFlex learning with their students.

Overall, teacher-respondents felt **"moderately ready"** to address technology integration, based on the findings. For those who felt moderately prepared to implement these HyFlex competencies, the results show the exact opposite. A

large proportion of participants who felt moderately prepared to implement this HyFlex instructional modality based on technology integration, they said that the training they've received on Internet-based distance education is very limited.

The rest of the respondents perceived the integration of technology as essential when dealing with the communication process between students and teachers. However, only four in the categories were rated as **"ready"** to implement the full capacity of the orientation of technology with regard to the teaching and learning process.

Table 6 Teacher's Perception of their Readiness Towards Teaching Using HyflexInstructional Modality in Terms of Technology-Oriented

Terms of Teemology offented						
TECHNOLOGY-ORIENTED	MEAN	SD	DESCRIPTION			
The teacher has access to various learning websites tonavigate additional	2.16	0.465	Moderately Ready			
resources for the course						
Consistency of internet connection is readily	1.9	0.798	Moderately Ready			
available to conduct online classes						
Competent in basic computer operations (e.g., creating and editing documents)	2.52	0.785	Ready			
Navigate within the course in the learning management system (e.g., Moodle,	2.54	0.610	Ready			
Canvas, Google)						
Share open educational resources (Web resources, games and simulations)	2.23	0.529	Moderately Ready			

ISSN No:-2456-2165

Use synchronous Web-conferencing tools (e.g., Google Meet, Zoom, Skype,	2.73	0.489	Ready
Adobe Connect, etc.)			
Proficient in the application of Web-conferencingsuch as integration of activities			
while using the	1.83	0.551	Moderately Ready
applications/platforms features			
Use the Google Sites/e-portfolio as a tool for submission of projects,	2.24	0.911	Moderately Ready
assignments, quizzes, etc.)			
GENERAL WEIGHTED MEAN	2.27	0.642	Moderately Ready
		25 100 V	

1.0- 1.74 –Not Ready, 1.75 - 2.49 – Moderately Ready, 2.50 - 3.34 – Ready, 3.35 - 4.00 – Very Ready

The findings of this study show that, despite many years of teaching experience, teachers are unfamiliar with the HyFlex instructional format. Overall, teachers believe they are prepared to teach in a HyFlex form, but specific competencies need to be adjusted and improved. Furthermore, instructors believed that HyFlex instruction can incorporate a variety of pedagogical strategies. However, significant support and resources are required before designing and implementing a course for those who are unfamiliar with this instructional format.

Other researchers firmly support the idea of integrating technology in teaching and learning and that is a paramount necessity to enhance students' performance at par with international standards. Technology in the classroom necessitates a paradigm shift in teaching and learning. The shift also has the greatest impact on teachers. The success of this approach will depend on how teachers are well prepared to meet the new requirements for implementing the curriculum. The role of teachers in the process of integrating technology into the classroom is vital, and any shift to a digital curriculum should consider how ready instructors are (Cuban, 2001). One of the key determining elements that may influence teachers' usage of technology is their preparation, and this has a substantial positive direct impact on the integration of technology in education (Inan & Lowther, 2009) cited in Al-Awidi, & Aldhafeeri, (2017).

The table below summarizes the mean score of teachers' level of readiness for the implementation of the hyflex mode of teaching. Generally, the result has an average mean of 2.47, and a standard deviation of .642 which is clearly defined as '*sometimes*' or '*moderately ready*' in adjectival rating, and the level of readiness is interpreted as **LOW** level based on the interpretation of the mean score adapted from the study of Tuan (2017). Thus, the results were deemed necessary to enhance the teachers' level of readiness towards the implementation of the hyflex instructional modality to all dimensions of preparation as specified in this study.

Table 7 Summary	of the Mean	Score of Teachers	' Level of Readines	s for Implementi	ngHyflex M	ode of Teaching
2				1		0

			1 8 9	
PEDAGOGICAL	MEAN	STANDARD	ADJECTIVAL	LEVEL OF
ENGAGEMENTS	SCORE	DEVIATION	RATING	READINESS
Digital Platforms/TeachingTools	2.72	.559	Often	High
Teaching Strategies Applied	2.47	.701	Sometimes	Low
Teaching Approach to HyflexMode of	2.49	.664	Moderately Ready	Low
Instruction				
Technology-Oriented on	2.27	.642	Moderately Ready	Low
Hyflex Mode of Instruction				
General Average of Weighted Mean	2.47	.642	Sometimes/ Moderately	LOW
_			Ready	

1.0 - 1.74 – Very Low, 1.75 - 2.49 – Low, 2.50 - 3.34 – High, 3.35 - 4.00 – Very High

Kariyev et al., (2018) posited that the teacher's positive attitude towards the introduction of new pedagogical technologies into his/her work, persuasion of the necessity of using interactive methods for the development of students' creative abilities, an interest in improving the ability to use interactive teaching methods, and the teacher's awareness of the development of new pedagogical technologies are the indicators of the motivational component of the desired readiness.

Thus, the implementation of the HyFlex mode of teaching needs preparations of technology-based teaching and learning through technical support by the school's top management. Capel et al., (1995) cited in the study of Mokhothu (2015), mentions that "effective teaching and learning depend on the ability of the teacher to create

learning experiences that bring desired education outcomes".

Hence, if the integration of technology in school is appropriately demanded and continuous support is adequately provided, then the teachers' level of readiness for the implementation of the HyFlex mode of teaching obtains high performance and a huge success for both teachers and students.

IV. CONCLUSIONS

Based on the findings of the study, it can be disclosed that the readiness level of the teachers in the local community college towards the implementation of the HyFlex instruction modality was necessary to take full

attention. It needs some improvements to practice and apply the pedagogical strategies and technological orientation across all programs offered. Teachers' full engagement in different approaches may become the core components to deal with the students' positive learning outcomes and prolific sources of knowledge to achieve higher performance and greater demand in various competencies. The findings of the study were then interpreted below:

The majority of the respondents have not fully adapted to face-to-face classes. Lesser number of teaching personnel utilized this modality, in fact, those who handled technical subjects were only required to do so. Thus, when respondents were asked what cyclical implementation plan they had adopted, the results were only a few chose intervals of schedule in their actual classes. Hyflex and synchronous online were commonly practiced by the teachers with the use of Google forms/meet/classroom, and Facebook Page/Messenger as a means of communication and/or teaching and learning process.

Limited exposure to various learning activities and instructional resources leads to a low level of readiness in terms of the application of teaching strategies during the adaptation of the HyFlex mode of teaching. Thus, teachers' engagement toward implementing HyFlex instructional modality was rated as low. The integration of those strategies being presented stimulates interest and motivation in the students in order for them to engage in various activities.

Relative to the teachers' readiness perceptions, both the teaching approach and technology-oriented were rated as "moderately ready". This means that the level of readiness signifies "low" level. Teachers in the said local college institution is not only fully prepared and equipped with communicative teaching strategies. Not all teachers were applying fun and challenging activities such as technology-based learning resources which provide an avenue for the students to take an opportunity to explore new ideas.

RECOMMENDATIONS

➢ Based on the foregoing conclusions arrived, the researchers recommend the following:

Mastery of the use of digital platforms and application can be a great way to easily navigate and creatively produce learning resources so that the students can have various options to study the lessons such as using video recording, video clips, Canva, and others that makes them impress with extra-ordinary activities and outputs. Other suggested digital technology are Youtube, Twitter, Blogs, Wikis, online assessment tools, and other applications essential to instruct and engage for assessing students' learning.

The school administrators should visit the teachers' online classes from time to time or constantly check whether they actually follow the lesson objectives or not. It is vital that teachers are encouraged to prepare differentiated activities that arouse students' interest in the lessons.

It is recommended that administrators should provide a stable internet connection in school so that teachers cannot be distracted when online classes are ongoing. Besides, let the teachers attend training and seminars on how to make creative instructional materials, and how to make course syllabi and activities aligned with the objectives and outcomes of the course. Above all, it is also recommended that the school administrator must impose a production of printed modular lessons or completely packed modules to evaluate whether the teacher is really discussing the whole topic ornot. The administrator also should give time a 'walk through' or re-orientation of the teachers regarding the use of electronic learning approach and online teaching strategies particularly to those newly-hired teachers who are not familiar with the integration of technology in the teaching and learning process.

Limitations:

The limitations of this study were that the survey questions are not necessarily generalized the larger population of teachers in the local community college. In gathering the data, part-time teachers were not included, thus, only full-time teachers participated in this study. Besides, the questionnaire is not enough to present a clear consensus on teaching performance and the teaching personnel's readiness level with which the results depend only on the second semester for the Academic Year 2021-2022. If there are any changes in the administration, then employees' job appointments may be affected. Therefore, the secondary data and the results of the problem presented in this study are subject to any changes and fluctuations.

REFERENCES

- [1]. Abdelmalak, M. M. M., & Parra, J. L. (2016). Expanding learning opportunities for graduate students with HyFlex course design. *International Journal of Online Pedagogy and Course Design* (*IJOPCD*), 6(4), 1937.
- [2]. Al-Awidi, H., & Aldhafeeri, F. (2017). Teachers' readiness to implement digital curriculum in Kuwaiti schools. *Journal of Information Technology Education: Research*, 16, 105-126. Retrieved from http://www.informingscience.org/Publications/3685 (CC BY-NC 4.0)
- [3]. Bawane, J., & Spector, J. M. (2009). Prioritization of online instructor roles: Implications for competencybased teacher education programs. Distance Education, 30(3), 383-397.
- [4]. Beatty, B. J. (2014). Hybrid courses with flexible participation the HyFlex course design. In L. Kyei-Blankson and E. Ntuli (Eds.) *practical applications and experiences in k-20 blended learning environments. (pp. 153 -177).* Hershey, PA: IGI Global.
- [5]. Beatty Brian J., Teaching a Hybrid-Flexible Course. Hybrid-Flexible Course Design, Edtech Books. 2019. Hybrid-Flexible Course Design (Edtechbooks.Org)

- [6]. Beatty, B. (2020). Can HyFlex options support students in the midst of uncertainty? *Transforming Higher Ed*.https://er.educause.edu/blogs/2020/5/canhyflex-options-support-students-in-the-midst-ofuncertain
- [7]. Bell, J., Sawaya, S., & Cain, W. (2014). Synchromodal classes: Designing for shared learning experiences F2F and online students. *International Journal of Designs for Learning*, 5(1). https://doi.org/10.14434/ijdl.v5i1.12657
- [8]. Chakraborty, M., & Victor, S. (2004). Do's and don'ts of simultaneous instruction to on-campus and distance students via videoconferencing. *Journal of Library Administration*, 41(1-2), 97-112. https://doi.org/10.1300/J111v41n01_09
- [9]. Chan, S. (2010). Applications of andragogy in multidisciplined teaching and learning. *Journal of Adult Education*, vol. 39, (2).
- [10]. CHED-DOH Joint Memorandum Circular No. 2021-004 Retrieved: https://ched.gov.ph/wpcontent/uploads/CHED-DOH-JMC-No.-2021-004.pdf
- [11]. Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage.
- [12]. Hammond, L., Schachner, A., Edgerton, A. K., Badrinarayan, A., Cardichon, J., Cookson Jr., P. W., Griffith, M., Klevan, S., Maier, A., Martinez, M., Melnick, H., Truong, N., Wojcikiewicz, S. (2020). Restarting and reinventing school: Learning in the time of COVID and beyond. Learning Policy Institute. https://restartreinvent.learningpolicyinstitute.org/
- [13]. Kariyev, A. D. (2018). A study of teacher's readiness for teaching students by methods of interactive learning as a condition for developing students' creative abilities. *EDUCACION*, Vol. 39, p.15.
- [14]. Kearsley, G. (2010). Andragogy (M.Knowles). *The theory Into practice database*. Retrieved from http://tip.psychology.org
- [15]. Keiper, M. et. Al., (2021) Student perceptions on the benefits of flip grid in a HyFlex learningenvironment, *Journal of Education for Business*, 96:6, 343-351. Retrieved: https://doi.org/10.1080/088222222.2020.1822421

https://doi.org/10.1080/08832323.2020.1832431

- [16]. Ko, S., & Rossen, S. (2017). *Teaching online: A practical guide*. Oxon: Routledge.
- [17]. Margulieux, L. E., Bujak, K. R., McCracken, W. M., and Majerich, D. M. (2014, January). Hybrid, Blended, Flipped, and Inverted: Defining Terms in a Two Dimensional Taxonomy. Paper accepted to the 12th Annual Hawaii International Conference on Education, Honolulu, HI, January 5-9.
- [18]. Martin, F., Budhrani, K., & Wang, C. (2019). Examining faculty perception of their readiness to teach online. Online Learning, 23(3), 97-119. doi:10.24059/olj.v23i3.1555
- [19]. Mokhothu, K. (2015). The integration of technical subjects in civil technology curriculum withspecial reference to fet technical schools. *Central University of Technology, Free State.* https://core.ac.uk/download/pdf/222967554.pdf

- [20]. Moore, M., Robinson, H., Sheffield, A., & Phillips, A. (2017). Mastering the blend: A professional development program for K-12 teachers. *Journal of Online Learning Research*, 3(2).
- [21]. Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). ELearning, online learning, and distance learning environments: Are they the same?. The Internet and Higher Education, 14(2), 129–135. doi:10.1016/j.iheduc.2010.10.001
- [22]. Msila, V. (2015). Teacher readiness and information and communications technology (ICT) use in classrooms: A South African Case Study. Creative Education, 6, 1973-1981. Retrieved from http://dx.doi.org/10.4236/ce.2015.618202
- [23]. Park, Y., & Bonk, C. J. (2007). Is online life a breeze? A case study for promoting synchronous learning in a blended graduate course. *MERLOT Journal of Online Learning and Teaching*, 3(3).
- [24]. Popov, O. (2009). Teachers' and students' experiences of simultaneous teaching in an international distance and on-campus master's programme in engineering. *The International Review* of *Research in Open and Distance Learning*, 10(3).
- [25]. Purcell, K., Buchanan, J., & Friedrich, L. (2013). The impact of digital tools on student writing and how writing is taught in schools.Retrieved from http://www.pewinternet.org /files/oldmedia /Files/Reports/2013/PIP _NWP %20Writing %20and%20Tech.pdf
- [26]. Raes, A., Detienne, L., Windey, I., & Depaepe, F., (2020). "A systematic literature review on synchronous hybrid learning: gaps identified," *Learning Environments Research*, 23(3), 269-290
- [27]. Roseth, C., Akcaoglu, M., & Zellner, A. (2013). Blending synchronous face-to-face and computersupported cooperative learning in a hybrid doctoral seminar. *TechTrends*, 57(3), 54-59. https://doi.org/10.1007/s11528-013-0663-z
- [28]. Ryu, J. & Boggs, G. (2016). Teachers' perceptions about teaching multimodal composition: The case study of Korean English teachers at secondary schools. *English Language Teaching*, 9(6).
- [29]. Seman, N., Daud, M., Makhtar, N., Rahman, N., & Ramli, F. (2021). Level of readiness and acceptance of mainstream teachers towards the implementation of inclusive education in learning disability. *Department of Special Education, Teachers Education Institute Kota Bharu Campus*. Malaysia.
- [30]. Smith, M. K. (2002) 'Malcolm Knowles, informal adult education, self-direction and anadragogy'. *The encyclopedia of informal education*. Retrieved from: www.infed.org/thinkers/et-knowl.htm
- [31]. Stewart, A. R., Harlow, D. B., & DeBacco, K. (2011). Students' experience of synchronous learning in distributed environments. *Distance Education*, 32(3), 357.381.https://doi.org/10.1080/015 87919.2011.610289

- [32]. Szeto, E. (2015). Community of Inquiry as an instructional approach: What effects of teaching, social and cognitive presences are there in blended synchronous learning and teaching? *Computers & Education*, 81, 191-201. http://doi.org/10.1016/j.compedu.2014.10.015
- [33]. Tatnall, A., Kereteletswe, O.C. & Visscher, A. (2011). Information technology and managing quality education. 9th IFIP WG 3.7 Conference on Information Technology in Educational Management, ITEM (2010). Springer.
- [34]. Tuan, V., (2017). Communicative competence of the Fourth-year students: basis for proposed English language program. Hanoi University of Business and Technology, Vietnam doi: 10.5539/elt.v10n7p104 website: https://files.eric.ed.gov/
- [35]. Wang, Q., Quek, C., & Hu, X. (2017). Designing and improving a blended synchronous learning environment: an educational design research. *International Review of Research in Open and Distributed Learning*, 18(3)