Challenges of the New Normal: Students' Attitude, Readiness and Adaptability to Blended Learning Modality

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Abstract— In Mid the second semester of the academic year 2019-2020, the Kalinga State University commenced the application of a blended/Flexible learning approach which combines synchronous and asynchronous learning modality.

This study explores students' attitudes, readiness for learning to determine their adaptability to a blended learning environment using different technological platforms and investigate problems and challenges that the students faced in their learning.

Drawing upon 508 questionnaires using the Google form, with closed and open-ended questions along with virtual interviews with 25 interviewees, The researcher analyses the survey data quantitatively and open-ended questions and virtual results qualitatively and then merges the two sets of results to assess in what ways the results about students' attitude and readiness to blended learning converge and diverge employing the convergent parallel-side by the side mixed-method approach.

Mixing the two databases by merging the results during interpretations, the findings revealed Technological Lapses, which covers the educational device's unavailability; unreliable internet connectivity hinders the success and productive implementation of blended learning adaptability. Students also have a positive attitude and showed a moderate level of readiness to implement blended learning. But there is a negative correlation between the students' attitude and students' readiness towards blended learning environment;

Conversely, results from open-ended question responses and the virtual-interviews confirmed or validated the results from the closed-ended questions

Keywords— Blended Learning, Students' Attitude, Students' Readiness.

I. INTRODUCTION

The COVID-19 pandemic quickly led to the closure of universities and colleges worldwide in hopes that public health officials' advice of social distancing could help to flatten the infection curve and reduce total fatalities from the disease. Face-to-face schooling is constructed as a specific threat from which the learners must be protected, and emergency flexible learning is the safety measure proposed to protect the learners within the community.

"The CHED Advisories have consistently advised HEIs to refrain from conducting face-to-face or in-person classes or mass gatherings in their campuses. These advisories have been disseminated in the print and broadcast media and several zoom meetings with HEIs considering the threat of community transmission due to the mass gathering of students. The CHED has not issued any policy to allow face-to-face classes, and the IATF clearly states that limited face-to-face classes in low-risk MGCQ areas must comply with CHED guidelines," said CHED Chairman J. Prospero E. De Vera III.

Higher Education Institutions (HEIs), like the Kalinga State University, strive to provide practical learning experiences to address the learners' needs. Blended learning through synchronous and asynchronous has emerged to address these needs and has been adopted by various HEIs. Furthermore, it can help students develop critical twenty-first-century skills such as communication, information literacy, creativity, and collaboration and develop the ability to use digital technologies for various purposes (Zurita, Hasbun, Baloian, & Jerez, 2015). While

these are essential skills, students' ability to acquire these skills will depend on their attitude and readiness to learn in a blended learning environment.

However, not all students and academic staff members are willing to adopt blended learning when introduced by their institutions. Although this teaching and learning approach offers various advantages to students and academic staff, there are many factors to consider that may affect its adoption.

As a result, one of the factors to consider is the Advances in network and communication technologies, which have shifted the way we deliver instruction to learners in any location. Due to enhanced communication systems and newer media formats, various innovative instructional methods have provided learning solutions meeting the diverse needs of instructors and learners in schools and other organizations. A significant concern in adopting the new technologies is whether learners are ready to utilize and adopt new technologies for the convenience and efficiency of learning educational content (MacDonald, J. 2003 as cited by Lim, D. H., et al. 2007). This study explores students' attitudes, readiness for learning to determine their adaptability to a blended learning environment using different technological platforms and investigate problems and challenges that the students faced in their learning.

II. BACKGROUND OF THE STUDY

I. Benefits of Blended Learning

The reports provided by the U.S. Department of Education (2010) indicating, "on average, students in online learning conditions performed better than those receiving face-to-face instruction" Students mentioned better overall satisfaction in blended learning courses rather than in traditional lecture as reported in the International Journal of Technology in Education (IJTE) (Martinez-Caro & Campuzano-Bolarin, 2011).

One of the reasons for BL mode being more preferred and effective is assumed to be the requirement to involve students in active learning through diverse learning approaches that include active peer communication, processing the information gained by constant self-reflection and "checking their understanding, organizing their knowledge, and making connections with what they already know" (Glazer, 2012, p. 3). The key features of blended learning pedagogy are interaction, flexibility, and suitable assessment forms (Smith & Hill, 2019).

The study of López-Pérez et al. (2011) shows that blended learning positively affects reducing dropout rates and a positive attitude on improving exam marks. Moreover, the students' perceptions on the attitude and readiness for blended learning are interrelated, with their

final marks depending on the blended learning activities and the students' age, background, and class attendance rate Graham, C. R., Woodfield, W., & Harrison, J. B. (2013)

II. The use of Technological Platforms in BL

Information technology (IT) has provided a new means for blended learning outside conventional classrooms. With the trend of using Information Technology, blended learning is an approach that gives the best advantage from class and online learning. It also helps the higher education to improve their understanding of how students see blended learning and formulate strategies to implement blended learning successfully. Furthermore, students' technological knowledge of various aspects of learning can also be essential in assessing students' readiness, which is a prerequisite for the successful application of blended learning (Firdaus, F. et al. 2020; and Tang, C., & Chaw, L. 2013)

One big challenges is how users can successfully use the technology and insuring participants' commitment given the individual learner characteristic and encounters with technology (Hofmann, T. et al., 2014). Hofmann adds that users getting into difficulties with technology may abandon the learning and eventual failure if technological applications. In a report by Oxford Group 92013), some learners (16%) had negative attitude to blended learning, while 26% were concerned that learners would not complete studyin blrended learning. Learners are essential partners in any learning process, and therefor, their background and characteristics affect their ability to carry on with learning effectivity, and being in blended learning, the design tools to be used may impingeon the effectivenessof their learning.(Keskin,S.,&Yurdugul,h.(2020)

Instructional strategies differ considerably from those that were formerly used to educate them. In this regard, university educators need to understand university students' readiness for blended learning by considering the technological-related factor that may affect this instruction method.

III. Students' Attitude towards Blended Learning

Birbal, R. et al.(2009) emphasizes that the attitude on learning flexibility reflects good points of blended learning, including better access to learning materials and freedom to decide where and when to study and at what pace. Blended learning improves students' attitude towards study management, which motivates them to organize their time when studying online as well as their familiarity with digital technologies which enables them to collaborate with other students for assignments and to interact with the lecturer. This study suggests five learning aspects through

which student attitude can be examined to study their readiness for blended learning. These five learning aspects are learning flexibility, online learning, study management, technology, and online interaction.

IV.   Students' Readiness for Blended Learning

Blended Learning readiness is defined as knowledge, skill, social, psychological, affective characteristics, and physical opportunities necessary for learners to make the most of e-learning environments (Yurdugül & Demir, 2017). Blended Learning readiness consists of six main components: computer self-efficacy, internet self-efficacy, online communication self-efficacy, self-directed learning, learner control, and motivation towards blended learning activities (Hung, Chou, Chen, & Own, 2010). The first three factors are related to learners' competence in technologies and communication tools for e-learning. The constructs of self-directed learning and learner control refer to learners' pedagogical knowledge and blended learning skills. These skills include students' learning methods, self-assessment, access to resources, resource management, and time planning. Self-directed learners can determine their learning needs, goals, and learning strategies without the help of others and also evaluate their learning results. Learner control can be considered an individual's ability to manage the learning process (Yilmaz, 2017). The construct of the motivation towards e-learning addresses the willingness and interest of students in affective terms.

These blended learning readiness components have a significant impact on learners' satisfaction and motivation in blended learning (Yilmaz, 2017). To provide positive e-learning experiences, learners must be ready for blended learning (Keskin, S., & Yurdugül, H., 2020). Blended learning readiness structures are an essential indicator that learners are ready for this process. Today, since the learners are accepted as a digital native, researchers start with the assumption that the learners are sufficient to use blended learning technologies (Keskin, S., & Yurdugül, H., 2020).

However, the attitude towards the usage of these technologies at different levels and the problems observed in blended learning processes have led to the need to evaluate the learners' blended learning readiness

Thus, if Blended learning environments are considered as a system, learner characteristics, which are the inputs of this system, considerably affect the outcomes from the system. E-learning readiness is one of the integral inputs in this system. Therefore, the readiness features of the learners to use e-learning environments emerge as an important construct in many studies (Yurdugül & Demir, 2017).

V.   Problems and Challenges to Blended Learning

The lack of suitable infrastructure and access to technology can cause some constraints for the successful integration of BL. Tshabalala, Ndeya-Ndereya, and Merwe (2014) have constructed a list of challenges that add to the constraints in implementing blended learning: "lack of policy, lack of faculty support, lack of technological and computer skills, large class sizes, and inadequate technological resources."

In the same vein, Smith and Hill (2019) identified a range of drawbacks, such as the necessity for clear goals and blended learning objectives. Furthermore, Mirriahi, Alonzo, and Fox (2015) indicated that a lack of institutional definition of blended learning causes some challenges, as well as the lack of staff capacity to engage with BL, increases the probability of misinterpreting the BL principles and practices.

As an example, the case study conducted by Tshabalaha et al. (2014) in South Africa investigated academic staff's perception of blended learning to allow for the identification of challenges encountered. It was determined that "the absence of a policy on blended learning; inadequate staff training; limited access to the computer laboratory for students" were problematic to the success of BL (Tshabalaha et al., 2014, p. 107).

Moreover, due to their study, Smith and Hill (2019) postulate that additional teacher training should be conducted for the staff before implementing blended instruction. This concept could be done through the appropriate governance and strategic leadership within an institution Namyssova, G., Tussupbekova, G., Helmer, J., Malone, K., Mir, A., & Jonbekova, D. (2019)

III.   FIGURES AND TABLES

INPUT	PROCESS	OUTPUT
• Conducted review of literature on a technological platform, attitude, readiness, and challenges to blended learning • Suggestion from collaborators for content Validity • Testing the reliability and validity	• Administered the Questionnaire Using the Google Form • Virtual Interviews using a technological platform • Data were gathered, processed, and treated statistically	• Adaptability to Blended Learning

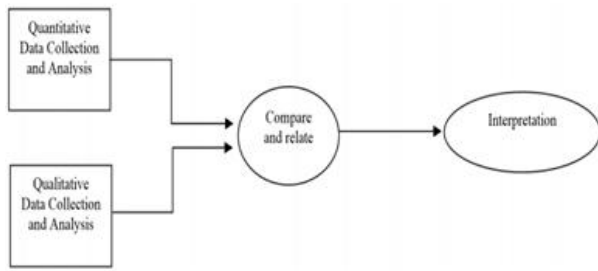*Fig.1: Conceptual Framework of the Study*

Fig.2: The research process in this study using the Convergent Mixed-Parallel Design

Table 1. Demographic Characteristics of the Study

The population of the study as to:	Frequency	Percentage
A. College Affiliation		
a) CA	28	5.51%
b) CF	19	3.74%
c) CBAPAE	43	8.46%
d) CCE	43	8.46%
e) COED	94	18.50%
f) CEIT	75	14.76%
g) CAF	14	2.76%
h) CILA	**129**	**25.39%**
i) CNHS	25	4.92%
j) CPAIG	14	2.76%
k) CPAIG(MPA)	4	0.79%
l) CBAPAE(MBA)	15	2.95%
m) COED(MAED)	5	0.98%
n) COED(Ph.D.)	28	5.51%
B. Year Level		
First	64	12.60%
Second	151	29.72%
Third	260	51.18%
Graduating	22	4.33%
Graduate School	11	2.17%
C. Sex		
a) Male	148	29.13%
b) Female	360	70.87%
D. Ethnic Affiliation		
a) Kalinga	400	39.37%
b) Ilocano	67	13.19%
c) Tagalog	3	0.59%
d) Muslim	7	1.38%
e) Others	31	6.10%

Table 2. General information about participants and Accessibility to Technological Platforms of a BL

		F	%
What face-to-face instructional	*Lecture*	*378*	*82.35%*
	Face-to-face Discussion Groups	345	75.16%

delivery you experienced during the residential learning(school setting)	Watching demonstrations	223	48.58%
	Roleplaying	160	34.86%
	Games (F2F)	10	2.18%
	Seminars	75	16.34%
	Laboratory	58	12.64%
	FieldWorks	110	23.97%
	Others(Please Specify)	42	9.15%
What flexible instructional delivery you experienced or given during the non-residential learning (off-campus learning) check at most 4.	Printed Lesson Modules	133	28.98%
	Watching lesson videos	181	39.43%
	Small group projects using online	128	27.89%
	Online Lesson tutorials	162	35.29%
	Email discussions	103	22.44%
	Using digital tools for searching	180	39.22%
	Use of Virtual Learning Environments	59	12.85%
	Use of purely online on Learning Manage	37	8.06%
	Online Lesson Modules	*289*	*62.96%*
	Own Understanding/Self Learning	1	0.22%
	Self-study/ searching	1	0.22%
What devices are available at home that you use for blended/flexible learning	*Smartphone/Mobile Phone*	*449*	*97.82%*
	Tablet	10	2.18%
	Laptop	88	19.17%
	Desktop	11	2.40%
	Cable TV	18	3.92%
	Radio	17	3.70%
How do you connect to the internet to assist you in your flexible learning course	*Mobile Data*	*406*	*88.45%*
	Broadband Internet(DSL, Wireless Fiber, Satellite)	31	6.75%
	Computer Shop	3	0.65%
	Other Sources outside Home with an internet	12	2.61%

	connection(neighbor, other establishments)		
	None	7	1.53%
How reliable are your **MOBILE DATA** internet connections at home for blended/flexible learning	Moderate Reliability	165	35.95%
	Low Reliability	***254***	***55.34%***
	No Internet Connection	40	8.71%
How reliable are your **BROADBAND** Internet (DSL, Wireless Fiber, Satellite) internet connections/ services at home for blended/flexible learning	Moderate Reliability	137	29.85%
	Low Reliability	***189***	***41.18%***
	No Internet Connection/Not Applicable	134	29.19%
How reliable are your Other Sources outside the home with an internet connection(neighbor, Barangay Hall) for blended/flexible learning?	Moderate Reliability	110	23.97%
	Low Reliability	***210***	***45.75%***
	No Internet Connection/NA	139	30.28%
What social media platforms do you use in blended/flexible learning	Facebook	154	33.55%
	FB Messenger Group Chat	***347***	***75.60%***
	E-mail	237	51.63%
	You Tube	68	14.81%
	Others(Please Specify)	33	7.19%
What Learning Management System or e-learning platforms do you want to use for future flexible	Facebook	111	24.18%
	Messenger Group Chat	234	50.98%
	Gmail	145	31.59%
	School's own LMS	53	11.55%
	Google Classroom	***256***	***55.77%***
	Edmodo	42	9.15%

learning	Moodle	31	6.75%
	Other(Please Specify)	26	5.66%

Table 3. The factors that affect the readiness of students for a blended learning environment

Dimensions for Readiness to Blended Learning	**Mean**	**Descriptive Interpretation**
On Learning Flexibility:		
1. I am ready to increase my opportunity to access unlimited lecture materials and use information	3.65	Ready
2. I am ready to study at my own pace and have the opportunities to reflect on what I have learned	3.57	Ready
Sub Area Mean	***3.61***	***Ready***
On Online Learning		
3. I am ready and comfortable with self-directed learning, for it helps me better understand the course lessons	3.23	Approaching Readiness
4. I am ready for online-based learning activities as it provides richer instructional content to understand course requirements better than face to face approach	2.85	Approaching Readiness
5. I am ready to learn from things I hear, like lectures, audio recordings, and video format lessons, and	3.37	Approaching Readiness
6. I am ready having my lessons on online-based activities for I am likely to finish a degree508 responses	3.32	Approaching Readiness
Sub Area Mean	***3.19***	***Approaching Readiness***
On Study Management:		
7. I became multitasked and organized my time better when studying online with the Blended Learning modality	3.49	Approaching Readiness
8. Blended learning through online motivates me to prepare well for my studies by	3.54	Ready

developing strong time management skills		
9. I am ready to be more responsible for my studies through the Blended Learning modality	3.51	Ready
Sub Area Mean	***3.51***	***Ready***
On Technology Readiness:		
10. I am ready with technological learning because my university provides the resources necessary for students to succeed in the online-based Blended Learning modality	3.12	Approaching Readiness
11. I am ready to use platforms for learning- Social networking applications (Computer software and web-based services that enable people to interact with each other; blogs, wikis, video conferencing, online chat, Facebook/Messenger) which help me with learning	3.18	Approaching Readiness
Sub Area Mean	***3.15***	Approaching Readiness
On Classroom Learning		
12. I still believe that learning face to face more effective for it offers more opportunities to collaborate with other students in the classroom part.	3.63	Ready
13. There are more opportunities to collaborate with teachers face to face, and still like the fast feedback when I meet my lecture in person in the classroom learning part of Blended /Flexible Learning	3.52	Ready
Sub Area Mean	***3.57***	***Ready***
Total Average Weighted Mean	***3.41***	***Approaching Readiness***

IV. CONCLUSION

Since the availability of the technology platform is the main characteristics of blended learning, school and students should invest in better accessibility for online learning.

Other research should be considered to understand how blended learning is related to students' characteristics like age, gender, disabilities if they have, such as blindness and hearing disabilities.

KSU as an HEI's should explore partnerships with relevant agencies and organizations to strengthen and complement existing resources or connectivity to ensure undisrupted learning of the students and should survey grants and/or support for faculty on transitioning to flexible learning.

The systems and procedures for the transition to blended/flexible learning should be disseminated to all students, which may be in the form of a policy document such as a manual or incorporated in the student handbook.

HEIs should implement students' mechanisms to receive/access printed or digital course packages/instructional materials through designated pick up points or through digital platforms.

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