

Readiness of SASTE and SHS A Teachers and Students for Blended Learning in the New Normal

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ABSTRACT: This descriptive study aimed to assess the readiness of SASTE and Senior High School Set A teachers and students for flexible learning in the new normal. Data were obtained from 466 participants through questionnaires using google forms. Results reveal that majority of the participants live within Cagayan Valley. Majority or 88.41% of the participants have access to the internet, of which the top three providers include their personal data, PLDT fiber and Globe wifi. Majority or 56.87% perceive their connectivity from good to excellent while 43.13% assess it from weak to no connectivity. It is significant to note that majority of the participants use their cellphone to access the internet, followed by their laptops and ipads. The participants utilized, and they are familiar of flexible learning platforms like Edmodo, Google Classroom, Schoology and Microsoft Teams, among others. Both teachers and students chose blended learning, followed by modular approach, asynchronous modality, and the synchronous modality as preferences for the next academic year 2020-2021. The participants are ready for blended learning in the new normal in terms of self-directed learning, self-efficacy and motivation. However, they are quite ready in terms of digital engagement.

KEYWORDS -New normal, Flexible/Blended learning, Readiness in the new normal, Synchronous and Asynchronous learning

I. Introduction

The onslaught of COVID-19 brought unprecedented changes and challenges in the education sector. This includes a quick transition among schools from the traditional face-to-face to alternative delivery systems and flexible modalities - blended, online/synchronous, or offline/asynchronous.

Before the global pandemic, St. Paul University Philippines (SPUP) used to offer its basic education as well as its tertiary programs using the remote or traditional face-to-face modality. During the lockdown last March 2020 which placed the province of Cagayan on an Enhanced Community Quarantine (ECQ) status, schools were forced to transition to other learning modalities. In April 2020, SPUP as it practices resiliency and creativity in its program delivery released its Learning Continuity Plan for learning to continue amid the pandemic. For the Basic Education where Senior High School belongs, online/blended learning was adopted. The same was the case for the tertiary level. Blended learning involves a combination of the synchronous as well as asynchronous tasks, from instruction up to assessment. Tayebinik, M., & Puteh, M. (2012) claimed that blended learning can be considered as an efficient approach of distance learning in terms of students' learning experience, student-student interaction as well as student-instructor interaction and is likely to emerge as the predominant education model in the future. Alammary, A., Sheard, J., & Carbone, A. (2014) posited that blended learning has been growing in popularity as it has proved to be an effective approach for accommodating an increasingly diverse student population whilst adding value to the learning environment through incorporation of online teaching resources. Selecting the most appropriate design approach for a blended course is a major challenge for many teachers in higher education institutions who are new to the idea of blended learning. Hoic-Bozic, N., Mornar, V., & Boticki, I. (2008) assert that blended learning has become an increasingly popular form of e-learning, and is particularly suitable to the process of transitioning towards e-learning from traditional forms of learning and teaching. Further, the model is realized as a combination of a face-to-face environment and online learning, using a proprietary learning management system. Kenney, J., & Newcombe, E. (2011), learned many important things as an early adopter of blended learning in an institutional environment that, at the time, had little experience and resources for supporting organized implementation of online education. The major contributors to her successful adoption of the method were the opportunity to learn from other faculty using the approach,

and the ability to systematically assess and reflect on the adoption process through the use of action research which gave the instructor valuable information that they could use to modify the course design and implementation. This information can also help other faculty interested in adopting hybrid instruction, especially in situations where support is limited. Current trends show that online education is the future, and blended learning can be a great way to prepare educators and institutions for making the transition to online teaching. Blended learning (Kim, 2007) is known roughly as combining the traditional instructor-led classroom learning and technology-based e-learning. Blended learning, and e-learning for that matter, does not just happen by simply injecting some e-learning elements into a traditional course, or some e-learning courses into a traditional curriculum. There are several important issues in designing an effective blended learning program, both at the level of a course and a curriculum. Any methodology for creating a blended learning program must include three elements: scope and objectives of the blended learning program; an analysis of the relevant issues under the overall objectives set; addressing any problems identified in the analysis; and measuring the results of the blended learning program.

With this fast-paced transition due to the pandemic, how ready are both our teachers and students to shift to blended learning? The absence of the COVID-19 vaccine will halt school opening of face-to-face classes for the next school year, hence, this study.

Conceptual Framework

Bersin, J. (2004) defines blended learning as the combination of different training “media” (technologies, activities, and types of events) to create an optimum learning program for a specific purpose. The term blended means that traditional instructor-led training is supplemented with other electronic formats. According to Tandoh, K., Flis, N., & Blankson, J. (2014), the recent growth of technology and network systems in society has led to the development of innovative instructional delivery methods. These methods have refocused the way instructors teach, and students learn in academic settings. One of the areas where the use of technology has had a positive influence is blended education. The world is digitizing and higher education is not immune to this transition (Siemens, G., Gašević, D., & Dawson, S., 2015). However, the digitalization of contemporary learning environments results in a de-emphasis on teaching and learning spaces. When time becomes the primary organizing construct for education in a technology-supported environment, blending possibilities emerge around five components: migration, support, location, learner empowerment, and flow (Norberg, A., Dziuban, C. D., & Moskal, P. D., 2011). In a blended learning environment, there is a combination of face-to-face instruction and online learning. While technology and devices may also be used to support traditional instruction, some of the actual instruction is shifted to web-based content and activities. This shift allows students to have some control over the time, place, path, and pace of their learning – another critical element of blended learning. The teacher plays an important and direct role in a student’s learning by providing some face-to-face instruction, shaping the online learning, and providing support and guidance to students when needed. In blended learning, the online and face-to-face components are coordinated and work together to deliver an integrated learning experience. (<https://www.graniteschools.org/edtech/tip/blended-learning/>)

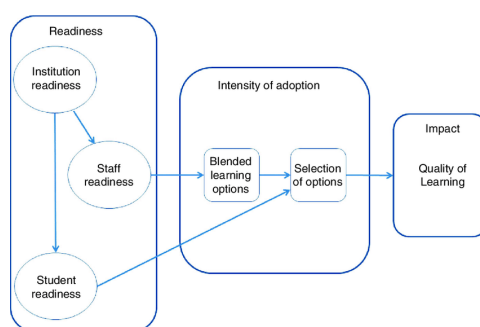


Figure 1. Wong Lily, Tatnall Arthur, Burgess Stephen (2014), Framework for Blended Learning Effectiveness

Fig. 1 represents a theoretical framework, which according to the authors, is tailored for higher education institutions. This provides an overview of the blended learning experience as regards to readiness, intensity of adoption, impact, and quality of learning. The framework can be used to examine different stages of adoption of blended learning. For instance, when considering the initial adoption of blended learning it would be useful to concentrate upon the readiness aspect of the framework. When examining the section of blended learning options by students, the intensity of adoption section of the framework would be considered, with some reference to staff and student readiness. In regards to the quality of learning achieved it is likely that the impact section of the framework will be considered in conjunction alongside the intensity of adoption as different blending learning options are likely to be assessed. (Wong Lily, Tatnall Arthur, Burgess Stephen, 2014)

Statement of the Problem

This study looked into the readiness of SASTE and SHS A teachers and students for flexible learning in the new normal.

Specifically, it sought answers to the profile of the participants when grouped according to residence/location, and enrolment with SPUP for AY 2020-2021; the internet accessibility of the participants in terms of access to the internet, internet provider, quality of internet access, length of exposure, and gadget used; the flexible learning platform to which the participants are familiar with, and modality recommended by the participants for AY 2020-2021; the readiness of the participants in shifting to online/blended learning in terms of self-directed learning, self-efficacy, digital engagement, and motivation; problems encountered by the participants in shifting from face-to-face to online/flexible learning modalities; and their recommendations to address the problems encountered.

II. Methodology

To establish answers to the objectives of the study, the mixed method of research was used. On the quantitative part of the study, data were collected to describe the readiness of the participants on flexible learning in the new normal. The qualitative component elicited the problems encountered by the participants in shifting from face-to-face to online/flexible learning modalities together with their recommendations to address the problems encountered.

Table 1. Participants of the study

Participants	Frequency	Percentage
SASTE Faculty	30	6.44
SHS A Faculty	22	4.72
SASTE Student	84	18.03
Grade 11 Student	147	31.55
Grade 12 Student	183	39.27
<i>Total</i>	<i>466</i>	<i>100.00</i>

The study comprised of four hundred sixty-six (466) participants, of which fifty-two (52) are faculty and four hundred fourteen are students who are enrolled in SASTE and SHS A for the Second Semester, AY 2020-2021. In gathering the needed data, the researcher used the questionnaire of Raymond Doe, et. al on Assessing Online Readiness of Students. The instrument shows a Cronbach alpha of $\alpha = 0.723$. Leary, (2004) claims that a Cronbach's alpha of 0.70 or above is usually considered acceptable. Further, open-ended questions on problems encountered by the participants in shifting from face-to-face to online/flexible learning modalities as well as their recommendations to address the problems encountered were raised.

The researcher created a google form with the information needed to address the objectives of the study. This was floated/ circulated to members of the SASTE and SHS Set A family. After the forms were accomplished by the participants, data gathered were statistically treated, analyzed, and interpreted. The results were further analyzed and were used as basis in determining the department's flexible learning plan for AY 2020-2021.

In interpreting the data gathered, the frequency, percentage and visual presentations were used to present the profile of the participants, their internet accessibility, familiarity with flexible learning platforms and recommended flexible learning modalities. The weighted mean used to interpret the online readiness of the participants shifting to online/blended learning for AY 2020-2021. Further, the thematic analysis was used to interpret responses of the participants on problems encountered in shifting from face-to-face to online/flexible learning modalities as well as their recommendations to address such.

III. Results and Discussion

3.1 Participants' Profile

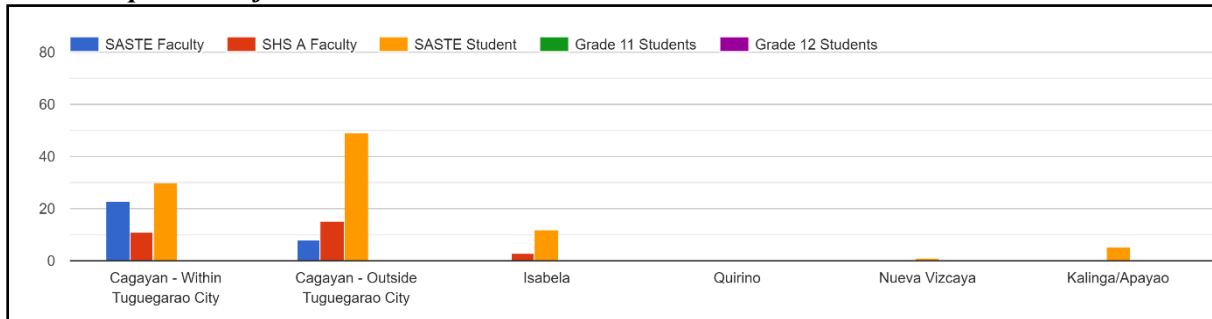


Figure 2. Participant's Profile in terms of residence/location

Data shows that majority of the participants live within Cagayan (but outside Tuguegarao City) and within Tuguegarao City. Very few reside in Kalinga/Apayao/Quirino/Nueva Vizcaya.

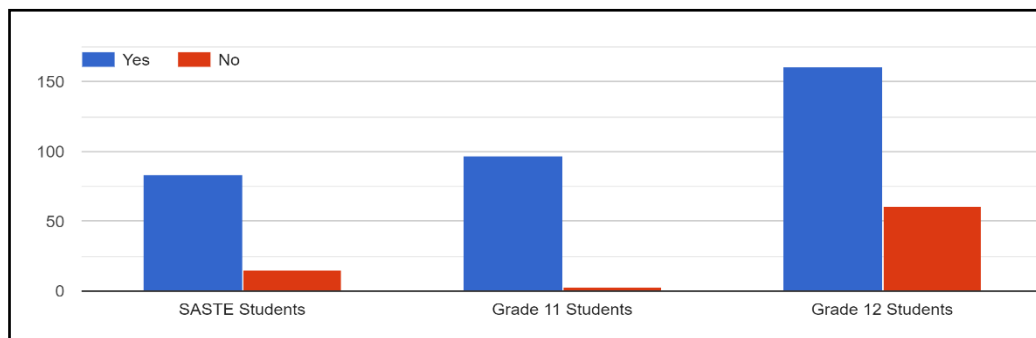


Figure 3. Student-participants' responses when asked if they are enrolling for AY 2020-2021

When students were profiled as to whether they intend to enroll in SPUP for the 1st semester, AY 2020-2021, and with the changes experienced to close the 2nd semester, AY 2019-2020, 335 confirmed they are coming back and 79 said they are not enrolling. Majority of the currently enrolled students signified their enrolment for the next school year.

3.2 Participants' Internet Accessibility

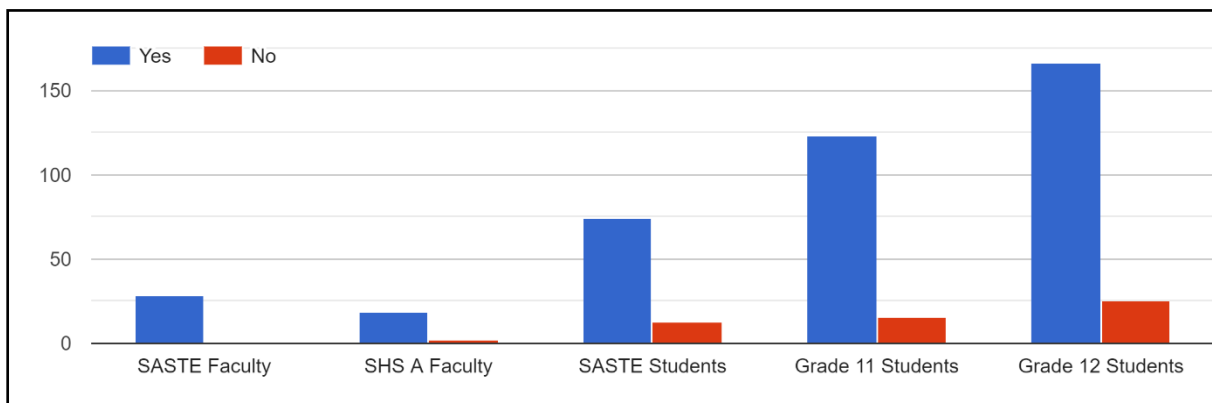


Figure 4. Participants' access to the internet

Fig. 4 shows that majority or 88.41% of the participants have access to the internet. Out of the 466 participants, only 56 or 11.59% do not have good connectivity. It is significant to note that the participants can access the internet.

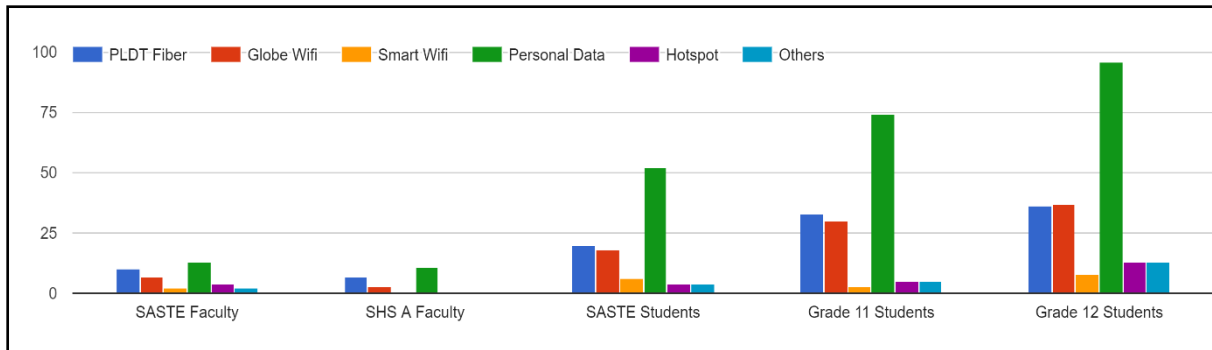


Figure 5. Participants' internet provider

Fig. 5 shows that the participants uses the top three internet provider – personal data, PLDT fiber and Globe wifi. Very few uses smart wifi or hotspot.

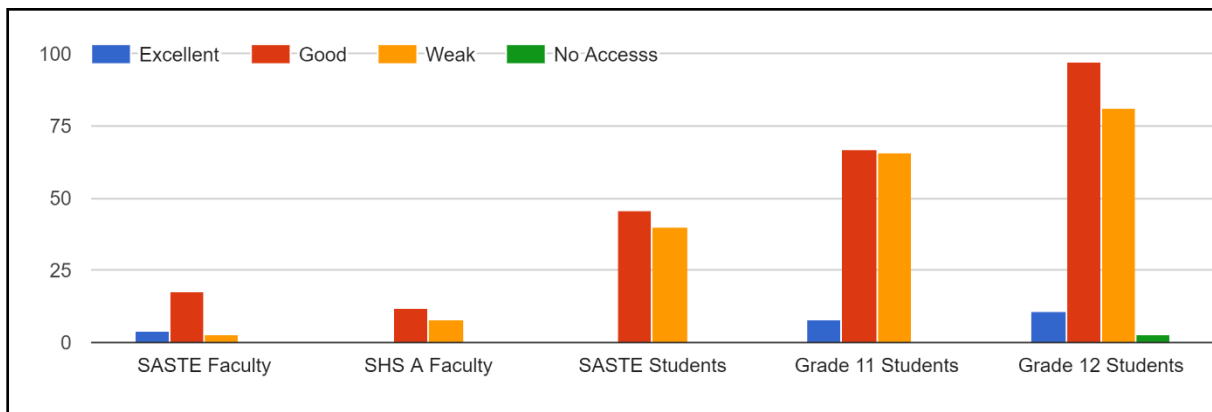


Figure 6. Participants' quality of internet access

Fig. 6 shows the personal assessment of the participants in terms of the quality of their access to the internet. Majority or 56.87% perceive their connectivity from good to excellent while 43.13% assess it from weak to no connectivity. Though majority of the participants have internet access, almost half of them claim that their connectivity ranges from weak to no access.

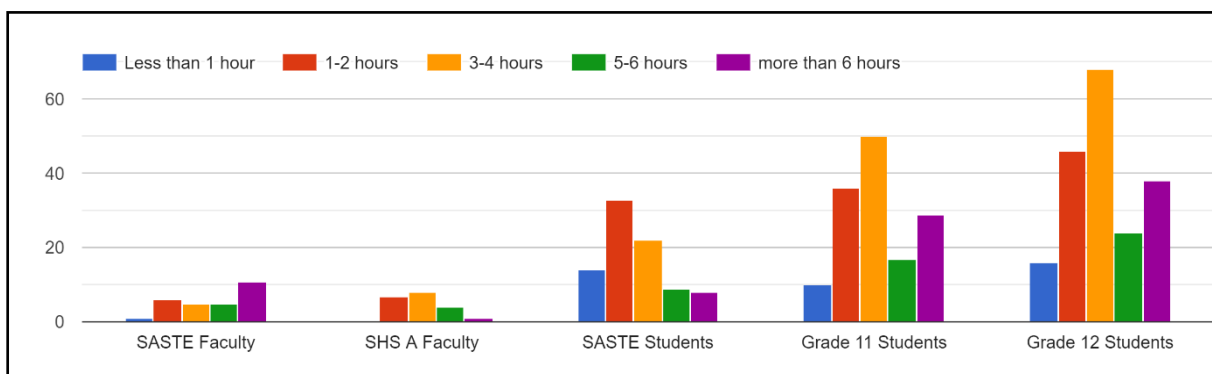


Figure 7. Participants' length of internet exposure per day

On the average, the participants' access the internet for 3 to 4 hours a day. While there are those with limited exposure or access, it can be seen from the data that majority can access the internet for at least 3 to 4 hours a day.

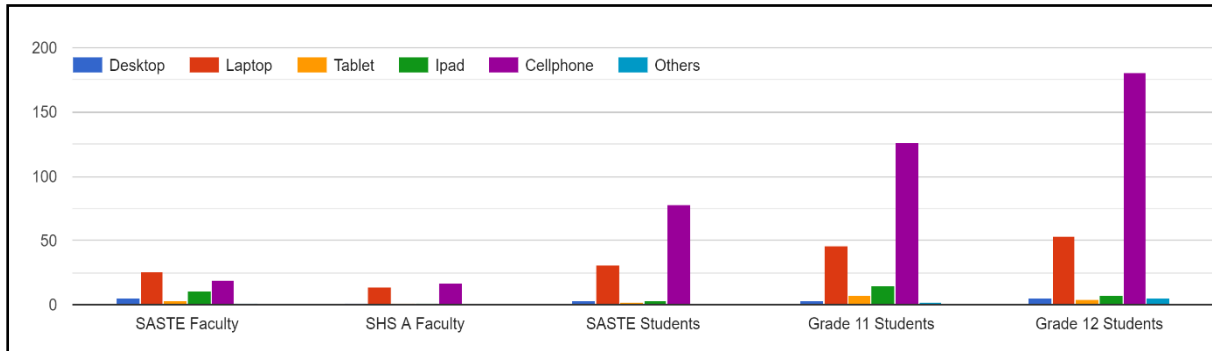


Figure 8. Participants' gadget used

When asked about the gadgets used to access the internet, majority of the participants claimed that they use their cellphone. This is followed by laptops and ipads.

3.3. Participants' familiarity with learning platforms and recommended learning modality for AY 2020-2021

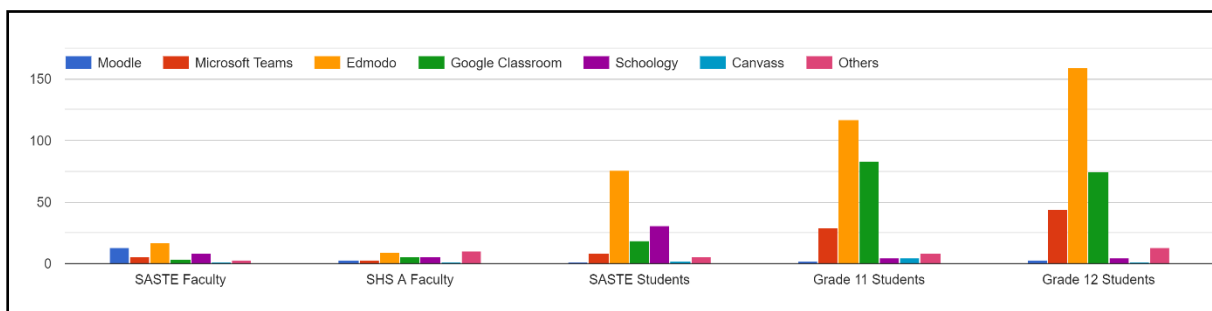


Figure 8. Participants' Familiarity with Learning Platforms

With the immediate shift from face-to-face to blended/flexible learning due to the COVID-19 pandemic, schools had to transition quickly in terms of their instructional delivery. Data on Figure 8 reveals that the participants utilized, and they are familiar of flexible learning platforms like Edmodo, Google Classroom, Schoology and Microsoft Teams, among others. These are among the modalities utilized by teachers to deliver their classes to close the second semester of AY 2019-2020.

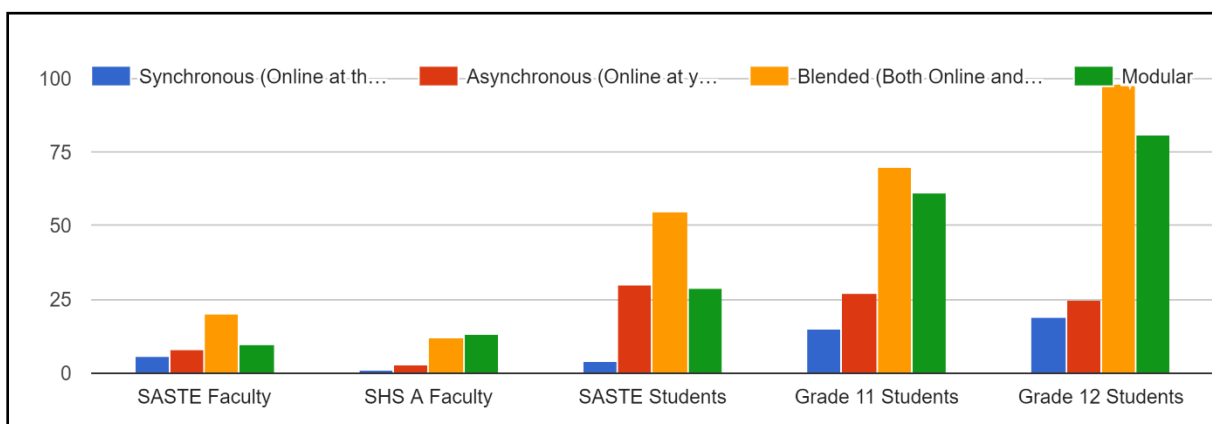


Figure 10. *Participants' Recommended Learning Modality*

Knowing that vaccine to combat COVID-19 is not yet available and that schools might not hold face-to-face classes for AY 2020-2021, the participants were asked to recommend on learning modality that suits their current situations. Data on Figure 9 reveal that both teachers and students prefer blended learning which is a combination of both synchronous and asynchronous sessions, followed by modular approach where modules and/or learning packets are given to students, asynchronous modality where students access learning tasks on their own pace and the last is the synchronous modality where the teacher and the students meet at a common time. Vaughan (2007) claimed that students indicate that a blended learning model provides them with greater time flexibility and improved learning outcomes but that initially they encounter issues around time management, taking greater responsibility for their own learning, and using sophisticated technologies. Faculty suggest that blended courses create enhanced opportunities for teacher-student interaction, increased student engagement in learning, added flexibility in the teaching and learning environment, and opportunities for continuous improvement. They state that the challenges faced in developing such a course include a lack of time, support, and resources for course redesign, acquiring new teaching and technology skills, plus the risks associated with delivering a course in a blended format. From an administrative perspective, blended learning presents the opportunity to enhance an institution's reputation, expand access to an institution's educational offerings, and reduce operating costs. The challenges consist of aligning blended learning with institutional goals and priorities, resistance to organizational change and lack of organizational structure and experience with collaboration and partnerships.

3.4 Participants' readiness in shifting to online/blended learning

Table 2. Faculty Participants' readiness in shifting to online/blended learning

Dimensions	SASTE Faculty		SHS A Faculty	
	Mean	Int.	Mean	Int.
Self- Directed Learning				
1. I am able to set goals and deadlines for myself.	3.12	Ready	3.18	Ready
2. I would classify myself as someone who is self-disciplined to get things done on time.	3.22	Ready	3.19	Ready
3. I am able to work independently.	3.16	Ready	2.24	Ready
4. I am willing to ask help from my colleagues.	3.25	Ready	3.2	Ready
5. I do not quit just because things are becoming difficult in the new normal.	3.04	Ready	3.08	Ready
Categorical Mean	3.16	Ready	2.98	Ready
Self-efficacy				
1. I am convinced that I can give the same value of education for an online class.	3.34	Ready	3.4	Ready
2. I am capable of learning new skills for an online class.	3.12	Ready	3.28	Ready
3. I can spend 4 to 6 hours per week for an online class.	3.34	Ready	3.4	Ready
Categorical Mean	3.27	Ready	3.36	Ready
Digital Engagement				
1. I am able to use email, internet, spreadsheet, and documents for learning purposes.	2.48	Quite Ready	2.42	Quite Ready
2. I do have a reliable device and internet service to use for an online course.	2.28	Quite Ready	2.40	Quite Ready
3. I am able to actively communicate online via email or discussions.	2.68	Ready	2.65	Ready
Categorical Mean	2.48	Quite Ready	2.49	Quite Ready
Motivation				
1. I am able to receive constructive feedbacks from others.	3.2	Ready	3.32	Ready
2. I am willing to attend trainings to prepare me to teach online.	3.08	Ready	3.18	Ready
Categorical Mean	3.14	Ready	3.25	Ready
Overall Mean	3.01	Ready	3.02	Ready

Table 2 shows the readiness of the teacher-participants in shifting to online/blended learning for the next academic year. It shows that among the four dimensions considered, self- efficacy had the highest mean while digital engagement has the least. The findings of Rafiola, R., Setyosari, P., Radjah, C. & Ramli, M. (2020) reveals that learning motivation, self-efficacy, and blended learning together have a significant effect on the students' achievement. Serrano, D. R., Dea- Ayuela, M. A., Gonzalez- Burgos, E., Serrano- Gil, A., & Lalatsa, A. (2019) claimed that blended learning has risen in popularity in the last two decades as it has been shown to be an effective approach for accommodating an increasingly diverse student population in higher education and enriching the learning environment by incorporating online teaching resources. Blending significant elements of the learning environment such as face- to- face, online and self- paced learning leads to better student experiences and outcomes and more efficient teaching and course management practices if combined appropriately. Hence, an appropriate systematic and dynamic approach of blended learning design is crucial for a positive outcome, starting with planning for integrating blended elements into a course and creating blended activities and implementing them. Evaluating their effectiveness and knowing in which environments they work better and improving the blended activities designed from both the student's and instructor's perspective are critical for the next delivery of the course. Further, Owston, R. (2018) claimed that self-efficacy is typically stronger in blended courses compared to the other instructional modes. Tang, C. M., & Chaw, L. Y. (2016)

posited that to make effective use of technology for learning, one needs to have a certain level of digital literacy. Digital literacy for learning is more than just knowing how to operate the technology, but also having the right information management and critical thinking skills, as well as proper online behaviors. Overall, the teacher- participants are “ready” in shifting to online/ blended learning.

Table 3. Student Participants’ readiness in shifting to online/blended learning

Dimensions	SASTE Students		Grade 11 Students		Grade 12 Students	
	Mean	Int.	Mean	Int.	Mean	Int.
Self- Directed Learning						
1. I am able to set goals and deadlines for myself.	3.02	Ready	2.84	Ready	2.98	Ready
2. I would classify myself as someone who is self-disciplined to get things done on time.	3.14	Ready	3.04	Ready	3.2	Ready
3. I am able to work independently.	3.07	Ready	3.11	Ready	3.15	Ready
4. I am willing to ask help from my classmates.	3.26	Ready	3.33	Ready	3.27	Ready
5. I do not quit just because things are becoming difficult in the new normal.	3.22	Ready	3.2	Ready	3.24	Ready
Categorical Mean	3.14	Ready	3.10	Ready	3.17	Ready
Self-efficacy						
1. I am convinced that I can give the same value of education for an online class.	2.24	Quite Ready	2.10	Quite Ready	2.16	Quite Ready
2. I am capable of learning new skills for an online class.	2.88	Ready	2.72	Ready	2.98	Ready
3. I can spend 4 to 6 hours per week for an online class.	3.42	Ready	3.25	Ready	3.38	Ready
Categorical Mean	2.85	Ready	2.69	Ready	2.84	Ready
Digital Engagement						
1. I am able to use email, internet, spreadsheet, and documents for learning purposes.	2.25	Quite Ready	2.28	Quite Ready	2.33	Quite Ready
2. I do have a reliable device and internet service to use for an online course.	2.02	Quite Ready	1.96	Quite Ready	2.08	Quite Ready
3. I am able to actively communicate online via email or discussions.	2.35	Quite Ready	2.4	Quite Ready	2.34	Quite Ready
Categorical Mean	2.21	Quite Ready	2.21	Quite Ready	2.25	Quite Ready
Motivation						
1. I am able to receive constructive feedbacks from others.	3.26	Ready	3.28	Ready	3.25	Ready
2. I am willing to continue my studies despite educational new set-ups.	3.12	Ready	3.18	Ready	3.16	Ready
Categorical Mean	3.19	Ready	3.23	Ready	3.21	Ready
Overall Mean	2.85	Ready	2.81	Ready	2.87	Ready

Table 3 shows the readiness of the student-participants in shifting to online/blended learning for the next academic year. It shows that among the four dimensions considered, motivation, followed by self-efficacy had the highest means while digital engagement has the least. Both teacher and students are “quite ready” in terms of digital engagement. This can be attributed to the fact that teachers and students were used to the face-to-face learning modality. The findings of Uz, R., &Uzun, A. (2018) revealed that self-regulated and self-directed scores of experimental group differed significantly from the control groups` indicating that the use of blended instruction is more effective than traditional instruction in terms of developing self-regulated and self-directed learning skills. Students in the experimental group pointed out that the blended learning environment presented rich content, easy accessibility, effective guidance, and motivation. Geng, S., Law, K. M., &Niu, B. (2019) found out that the blended learning environment provides good facilitation for students’ social involvement in the class. Student technology readiness plays a stronger role in impacting the teaching presence in a blended learning environment than non- blended learning environment. These findings further imply that a proper blended learning setting creates a cohesive community and enhances collaborations between students. Prior training of learning technologies can potentially enhance students’ teaching presence. Generally, the overall mean reveals that the student-participants are “ready” to shift to online/flexible learning.

3.5 Problems encountered by the participants in shifting from face-to-face to online/flexible learning modalities and their recommendations to address the problems encountered

Though the participants revealed that they are “ready” in most dimensions of the Online Readiness Questionnaire, the following problems were raised which they consider a “must consider”. The participants were also able to raise some suggestions to address the problems raised.

Problems Encountered	Recommendations
<p>Internet Connectivity Issues Though the participants can connect to the internet, they find it important to have a strong internet connection to make learning happen smoothly. Some of them have unstable connection which is a factor that affects effective online/blended learning.</p>	<p>Design a learning plan that will cater to learners with strong, moderate, and weak to no connection.</p>
<p>Lack of Appropriate Gadgets and Load Allowance Majority of the participants access the internet through their mobile phones. They believe that appropriate gadgets will allow them to access information and materials appropriately and effectively. Lack of appropriate gadgets also imply difficulty in accessing to tasks administered online, hence the tendency for students to submit their outputs late because at the same time, they are also doing independent learning. Online/blended learning will also mean additional cost on their part since free data will not suffice to access online classes.</p>	<p>Offer blended/online learning to those who have the resources. Modular approach can be used for students without appropriate gadgets.</p>
<p>Data Privacy Since learning require so much of online work, from content to assessment, there is an issue on how safe will data be, how valid are the assessments made and how protected are the individuals in terms of their data privacy.</p>	<p>Publish data privacy policies of the school on appropriate manuals. Have massive information campaign of these policiesto faculty, students and stakeholders.</p>
<p>Lack of preparation/training and adaptability issues There is a quick shift from face-to-face to online/blended learning. Some participants worry that learning will not be as effective as the usual residential/remote learning that they are used to. Others find adjusting to the new modality will be quite stressful especially they have not been trained to have one before and that not all students</p>	<p>Retool and upskill faculty on learning modalities in the new normal. Conduct seminars/ trainings to equip teachers with the necessary content/skills/ attitudes needed for online learning. Provide orientation sessions to parents and students on modalities used.</p>

Problems Encountered	Recommendations
are for the flexible learning modalities.	
Mental Health issues The pandemic brought stress and other mental health related issues. For most, if these are mismanaged, these could lead to more serious problems, which can affect education to continue in the new normal.	Provide seminars on safeguarding mental health issues and/or guidance sessions with teachers and students. Show them that they are being cared for. Provide feedback on how well they perform and provide up-to-date information.

IV. Conclusions

The participants are ready for flexible learning in the new normal in terms of self-directed learning, self-efficacy and motivation. However, they are quite ready in terms of digital engagement. Digital engagement plays an active role in encouraging learner's motivation and participation. The shift from the traditional face-to-face to blended instruction entails immediate attention on issues and concerns which effects and impacts significantly on the quality of education. Hence, serious attention must be extended to address emerging problems brought by this transition in the educational landscape.

V. Recommendations

Based on the findings presented and the conclusions drawn, the researcher recommends the following:

1. The SASTE and SHS-A department may consider the findings of this study in the formulation of its flexible learning plan for AY 2020-2021.
2. The faculty should attend/be provided with trainings/seminars/conferences/webinars in order to smoothly transition from face-to-face to online/blended learning.
3. Faculty, students and parents should be provided with orientation on desired learning management system of the school.
4. A similar study may be explored to include assessment on the evaluation of flexible learning and other learning modalities used in the new normal.

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