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Online Learning Readiness of Secondary School Teachers towards Flexible and Blended Learning: Basis for Educational Strategy

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ABSTRACT : Online learning is a challenging concept that ensures education is catered through technological channels. This descriptive research aimed to understand readiness of teachers as they implement teaching using flexible and blended learning as basis for an education strategy especially in this COVID-19 pandemic. The respondents were 232 selected secondary teachers in the province of Camarines Norte. The result showed that there are 20 percent who are prepared for online teaching and most have gadgets/devices to be able to perform their online role as teachers. However, 80 percent of respondents have issues especially along the financial implication of flexible/blended learning as internet is quite costly in the Philippines and technological gadgets are expensive. The study recommends training, planning, and restructuring towards strengthening technology utilization, access, and resource generation for better delivery of education. It draws implications on developing better key strategies in building smart ways and reducing challenges in online education.
KEYWORDS : *COVID-19, Educational strategies, ICT integration, teaching modality*

I. INTRODUCTION

The use of technology in teaching empowers teachers in the teaching-learning process. However, developing skills in using different technological platforms in their class instructions provide a great concern especially now that everyone is facing this era of COVID-19 pandemic. [1] The teachers who underwent training before doing online teaching help boost their self-esteem and flexibility in performing their duties and functions. The so called online learning has different connotations and that includes learning that has the nature of being face to face using different technological tools. There are different platforms and media whether it is internet mediated teaching, web-based, virtual classrooms, and distance learning various consensus sometimes falls on the category of blended or flexible learning which fit in most of the teachers nowadays. [2] In most countries as the advent of academic concern is of topmost priority, integration of information technology in education further accelerated sustainability in continuing education and became an integral component towards its transition in every educational level. [3] These paved way to strengthen e-learning and the proliferation of digital platforms that could be used by the teachers in their teaching-learning activities. However, this poses another challenge in the educational system as many teachers as well as the whole educational system itself needs to adjust to a system where some are not familiar with.

In the Philippine educational structure, the majority of teachers are accustomed to traditional education which is face to face instruction. The teachers are very much familiar in a classroom setting where they can be able to conduct their lesson in the four corners of the room and as such there is a need to reorient teachers and to train them to teach via virtual learning environment to help them adjust to these sudden changes. [4] Moreover, a lot of studies pointed out the effective use of technology integration in the improvement of education in the secondary level from the different learning environments. [5] In fact, the onset of COVID-19 the Department of Education (DepEd) issued DepEd Memo No. 11, s. 2020 creating a Task Force for the management of the department's response to COVID-19. As such, DepEd Order No. 012, s. 2020 adopts the Basic Education Learning Continuity Plan (BE-LCP) that addresses health emergency through utilizing the different learning modalities such as distance learning, blended learning, home-schooling, and others. [6, 7]

This makes it more valid to argue that there should be a thorough planning and evaluation on the aspect of providing education through online means and/or using flexible or blended learning. In fact as mentioned from the article of Custodio (2020), the Department of Education opted for the use of blended or hybrid teaching, a fusion of online distance learning and in-person delivery of printed materials or modular distance learning approach as their method of choice to continue education to avoid face-to-face interactions and exposing the administration, teachers, students, and parents themselves to the risk of COVID-19. [8] On the other hand, tertiary education under the Commission on Higher Education stands on using the flexible learning as the new normal in delivering instructions where the researchers even believe would be an additional input for the Kto12 education to improve students' convenience and personalization in learning. [9] Even though these modalities invests in technology, teacher training, and retrofitting of facilities, there are ways where the combination of digital and non-digital technology provides flexibility and options largely benefitting students as they adjust themselves on the new normal teaching-learning pedagogy [Abad, D. J. V. (2020) [1].

However, this approach of online learning offers a lot more positivity in terms of flexibility which indicates more satisfaction both to the teachers and students. But the use of blended learning is opt to be better and beneficial to learning which is somehow chosen by most of the educational systems. [2] This provides the challenge of understanding how ready are the teachers in the abrupt implementation of online learning in the secondary level of education in the public schools and other schools who adopted flexible and blended learning which the researchers are trying to provide an answer in this study.

Likewise, the study provided some possible alternative delivery options that schools can consider in enabling technologies and platform to sustain educational progress through subscription or downloading them freely for use since some of which are free and can be used immediately for instructional and educational purposes. It is with great expectation from this study that the use of online teaching/learning in the educational community would promote promising return that will help sustain education despite the various threat and challenges ahead. The researchers believed that this "new normal" educational pedagogy would establish remarkable changes in education and would greatly make various enhancements in the future.

II. METHODOLOGY

The researchers utilized a descriptive method of research based on the objectives under study. For better use of time and data collection flow, the researchers carefully planned each activities needed to complete the study.The respondents of the study are the permanent and temporary secondary teachers from secondary public schools in Camarines Norte and are teaching flexible and blended learning modality. There are a total of 232 respondents for the SY 2020-2021 who practice online learning as verified by the respondents themselves which is of primary importance in this study as their instances were taken into consideration.

The questionnaire checklist was a primary survey tool used in this study. The researchers also took the opportunity to gather data using the available technology such as Google forms and tried to contact the respondents through SMS or through their mobile phones if necessary to establish proper communication and validation of the gathered responses. The researchers seek out the permission of the agency which is the Department of Education in the province of Camarines Norte to conduct research activities through surveys and limited interviews to the selected secondary teacher respondents. The next step was the development of the drafted questionnaire based on the objectives of the study and sought out pieces of advice, suggestions, and recommendations towards its validity and effectiveness. Since, there is limited face-to-face contact and to avoid the risk of being able to acquire COVID-19, the researchers decided to encode the set of questionnaire in the Google survey form which can be delivered and retrieved online. The respondents were requested to complete the survey using the Google form which they readily did immediately and the feedback was readily available due to the cooperation of the secondary teachers themselves. The .CSV format was extracted from the Google form and subjected to analysis and further verification.

The frequency and percentage technique were used to determine profile of the research respondents. This was also used to assess the online learning readiness of the public secondary teachers in Camarines Norte. Most of the results were shown using graphs for easy understanding of the perceptions of the respondents and to better visualize the data. Analysis of Variance (ANOVA) was used to get the significant difference between the variables of the study. The use of SPSS software helped in faster analysis of data.This research made careful consideration of the research ethics and standards by making efforts of seeking permissions from concerned organizations and taking into consideration to inform the participants as well. The participants made voluntary consent to personally participate from this study and also careful considerations were taken into account as not to violate the Data Privacy Act as all their responses did not reveal personal information aside from their emails

which were not revealed to the public and is made only available for the purpose of this study and for data consistency. The data collected from this study were destroyed upon completion

III. RESULTS AND DISCUSSIONS

It can be noted that the results of the study were presented based on the objectives of the study and were taken from the analysis of the data that were gathered from the respondents. In this study, there were three significant concerns that were identified such as the profile of the secondary school teachers. Another is the attitudes of the teachers towards online learning from a general perspective and also determination of the teachers' readiness in handling online learning. The profile and the readiness of the teachers were correlated as to determine variation and dispersal of data between and among their responses.

3.1 Respondents Profile

In Table 1, it can be observed that the respondents were mostly under the age bracket of 36-55 with 120 or 52 percent while significantly there are also 100 or 43 percent under the age bracket of 18-35. Moreover, most are female with 179 or 77 percent while males were 53 or 23 percent. Majority are also permanent secondary teachers in public schools in Camarines Norte with 227 or 98 percent.

Table 1. Basic profile of the Respondents

Parameters		Frequency	Percentage
Age	18-35	100	43
	36-55	120	52
	56-65	12	5
	Total	232	100
Sex	Male	53	23
	Female	179	77
	Total	232	100
Employment Status	Permanent	227	98
	Temporary	5	2
	Total	232	100

This implies that most of the respondents are mostly young and inexperienced especially that they were mostly in their middle age. Majority of them were female. This can be regarded as the most prominent data taken from the basic profile of the respondents which contribute significantly to the nature of the study. In contrast to most of the claim that this could not bear anything, the fact still provides evidences that this simple profile could be able to give interesting insights such that the age of teachers has implications on their utilization of ICT such that younger teachers tend to be more interested in technology reading and access. [10] In fact, just the same student learners also vary in terms of their perspective to online learning with respect to their age, digital experience and even their reception towards online learning strategies. [11]

3.2 Attitude of Teachers Towards Online Learning

In terms of the attitudes of teachers towards online learning as shown in Table 2, it can be said that most of the teachers have a positive attitude and support online learning. Most of them do concur within the sense that online learning was difficult as a bit like conventional classroom education. They do accept and feel much at ease communicating online. This was the perception of most of the public secondary school teachers lifted from the study of Ventayen (2019). Taking a careful observation on the attitudes of the teachers towards online learning, majority do agree that majority can think critically and create assignments that motivates students to perform critical thinking/analysis with a mean rating of 57 or 56.4 percent. This is true since majority of the teachers especially in the public secondary schools are equipped with ready to use teaching resources which they can upload online as students' activities. They can also upload several learning materials and assessment for evaluation which can be proliferated instantly through the use of messenger or Facebook groups. The trend nowadays makes it easier for the teachers to upload and download their resources and handouts which similarly encourages for the abundance of resources which students can utilize. In fact, considering the nature of online learning today, there are a lot of resources which are available online the only limitation is the capacity and technological prowess of teachers to be able to sought out these information and process them for their use. Content utilization should also follows proper acknowledgement of their sources that teachers should take into consideration into when utilizing digital contents.

Table 2. Attitude of Teachers toward Online Learning

ATTITUDES TOWARD ONLINE LEARNING	1	2	3	4	5
1. I believe that online learning is as rigorous as classroom instruction.	0	7	23	49	22
	0.0%	7.0%	22.8%	48.5%	23.8%
2. I believe that high quality learning experiences can occur without interacting with students face-to-face.	3	10	23	47	18
	3.0%	9.9%	22.8%	46.5%	17.8%
3. I support the use of discussion as a means of teaching.	0	1	17	53	30
	0.0%	1.0%	16.8%	52.5%	29.7%
4. I support learner-to-learner interaction and collaborative activity as a central means of teaching.	0	3	16	52	30
	0.0%	3.0%	15.8%	51.5%	29.7%
5. I recognize that community building is an important component of online teaching.	0	2	15	53	31
	0.0%	2.0%	14.9%	52.5%	30.7%
6. I encourage students to bring life experiences into the classroom and create activities that draw on those experiences.	0	1	10	49	41
	0.0%	1.0%	9.9%	48.5%	40.6%
7. I believe that lecture is the best way to convey content in mind discipline	2	5	20	48	26
	2.0%	5.0%	19.8%	47.5%	25.7%
8. I feel comfortable communicating online and feel that I'm able to convey who I am writing.	1	4	23	49	24
	1.0%	4.0%	22.8%	48.5%	23.8%
9. I am critical thinker and can develop assignments that encourage critical thinking in my students.	0	4	14	57	26
	0.0%	4.0%	13.9%	56.4%	25.7%
Weighted Mean			3.99 (Agree)		

Legend: 1- Strongly Disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly Agree

Another important point from the table shows that the respondents recognizes that community building is a critical component of online instruction and believe that the utilization of dialog/conversation implies instruction with 53 or 52.5 percent. In fact, different social theories and constructivist supports this idea and make sense to this notion of technology and interactivity. [12] As evidences showed importance of interaction between teachers and their students and through the use of technology would help establish this learning cooperation and collaboration. In the field of distance education, it is important to build a connection and through increasing interaction it would help alleviate psychological pressure brought by isolation and communication gap. This way it would help to promote better education and learning and will provide student satisfaction as well given their course contents which is sometimes difficult for them to handle. It would suffice to say that through building rapport and constant conversation would help consistency in the flow of the subject at hand and of course provide human factor as an essential input towards satisfying learning without much process-oriented approach. In some instances, most students would appeal to enjoy studying with interaction rather than not having one. Some learners are comfortable with online synchronous teaching that is why some of the students prefer attending lessons that are performed online. In some cases, as teachers are most likely familiar with traditional teaching as most students are, they do adapt to this form of instructions where there is a way for them to express their teaching techniques via online and can be able to perform the same real-time. Meanwhile, there are still those who accept that online learning is as thorough as classroom instruction with 7 or 7.0 percent. This is very common since majority are still adapting to this new normal way of education where most teachers are much familiar on the traditional face-to-face instruction while suddenly shifting to another paradigm which is yet unexplored to many.COVID-19 pandemic made school establishments adopt online learning instead of the traditional classroom setting which is the face-to-face classes. This was done in an effort to alleviate or end the transmission of virus which now brought a lot of challenges and made many different issues and concerns especially on the growing notion that teachers must also be ready for this abrupt change in the educational scheme. [13] Thus, the extent of online learning readiness of the teachers in terms of technology, teaching, and communication and organization was also an effort to give understanding on the needs of teachers to update themselves in facing this new frontier.

On the other hand, reality of online learning setup is much rigorous than traditional face-to-face modality as it demands proper preparation of learning materials which is sometimes needed to be posted upon further scrutiny. It demands time, preparation, and the use of technological infrastructure for it to be delivered to its intended user. Although the learner has flexibility in terms of learning as they can use self-paced learning, there are also cons as dilemma and difficulties are along the way. In the article of Pokharel (2020), there are dynamics at play to consider as teachers and students who have socio-economic disadvantage results in limited technological access and constraints are technically huge. [14] There are many households who have limited technological capacities thus, limiting their capability towards online learning education. Internet connection consideration would amount to at most a thousand pesos just to maintain monthly subscriptions for a full use of online communication platform and be able to browse resources that could help students in their learning. Even the Department of Education acknowledge the reality of this situation and encourage learners and teachers to use different platforms to access open education resources (DepEd, 2020). [7] It is expected that more and more students will be able to join online platforms in the future as network infrastructures and also network providers are constantly improving their services and some are making efforts are lowering their subscription fees. Also,

some schools and government organizations like LGUs and provincial libraries are offering free Wi-Fi services to students who are disadvantaged and direly in need to be connected to the internet for them to download learning materials, upload their homework/assignments, perform their assessment tasks given to them and be able to communicate with their teachers. Various establishments are also offering kiosks and "Piso Wi-fi" hubs that offers low-cost internet connection services which students and teachers alike could avail for them to be able to be connected online. Hence, there are some remarkable improvement in terms of setting up connection and be able to cope up with the difficulties posed by online learning.

Moreover, taking into consideration how online learning is performed at schools the so-called synchronous discussions are formally done via Zoom or Google meet but effectiveness and momentum of sustainability are relatively in question. The need for proper orientation and embracing the change and means of ensuring connectivity are major challenges. Not to mention the fact that some students are not well-versed and have difficulty concentrating in this kind of environment. The greater role of teachers and the educational community would bridge the gap on this matter as several policies and investment are needed to close this proximity and ensure that education will be sustainable through online learning in the next few years. Because of abrupt changes that occurred due to the proliferation of COVID-19 pandemic with the solution of continuing education through the use of various platforms and strategies, the utilization of a standard learning management system has made serious implications not only to teachers but also to the students who felt the adjustments are confusing and making them uncomfortable. But along the way, as the time progresses and various strategies were in-place such as the use of asynchronous means to augment lesson understanding, it mitigate difficulties and made remarkable changes as to how education is delivered and accepted. Such difficulties are well taken care of as some of the schools made use of different platforms that helped them surpassed several challenges they encountered in teaching. In terms of communication, they made use of Facebook messenger and group chats which essentially helped them to communicated with students. But not only that, it made possible to make contacts with the parents as well as they are mostly at large making a huge role to play in this distance education modality. Through various technologies that teachers could grasp, it could be said that such limitations of conducting online distance learning would not be so difficult in the future. As more and more teachers are acquainted and are now engage to learn various technological platforms for them to help in their classroom management, many of them even those old teachers who are fond of traditional means are currently enjoying some of the benefits of doing teaching online and online teaching/learning through distance education is not but a normal set up which are embraced both by teachers and students alike.

3.3 Secondary Teachers' Online Readiness

Table 3 shows that the teacher's online readiness were measured into three segments which were on technology, teaching, and the communication and organization. The first indicator was their online readiness when it comes to the use of technology. It can be observed that the highest mean rating was on them easily performing record administration errands on my computer such as replicating, moving, renaming, and erasing records or organizers with 3.71 or interpreted as strongly agree. The least on this category as that they perform video recording using a phone, tablet, or computer webcam with 2.93 or interpreted as agree. Meanwhile, in terms of the level of teachers' online readiness on teaching, the highest mean rating was they can utilize an assortment of educating techniques to assist students learn with 3.66 or interpreted as strongly agree.

Table 3. Level of Teachers' Online Readiness

Teacher's Online Readiness along:	WM	Interpretation
Technology		
1. I can easily use Microsoft Office tools such as Word and PowerPoint to create documents.	3.56	Strongly Agree
2. I can easily perform file management tasks on my computer such as copying, moving, renaming, and deleting files or folders.	3.71	Strongly Agree
3. I enjoy conversing with others online through social media or other discussion forums.	3.24	Agree
4. I use the Internet to locate resources for teaching.	3.17	Agree
5. I can record video of myself or other people/places/things with my phone, tablet, or computer webcam.	2.93	Agree
Teaching		
6. I am available to my students on a regular basis for questions and assistance.	3.51	Strongly Agree
7. I enjoy facilitating interactions among my students.	3.64	Strongly Agree
8. I use a variety of teaching strategies to help my students learn.	3.66	Strongly Agree
9. I enjoy trying new teaching approaches.	3.59	Strongly Agree
10. I provide lessons and activities that are connected to real-world applications.	3.59	Strongly Agree
Communication and Organization		
11. I communicate my expectations about participation, behavior, and work quality to my students.	3.45	Strongly Agree
12. I expect online teaching to take more time than face-to-face instruction, and I am prepared for it.	2.97	Agree
13. My teaching materials are scattered everywhere and I have trouble finding what I'm looking for.	2.14	Disagree
14. I'm not concerned about copyright law for online classes because everything is Fair Use	2.05	Disagree

	for education.		
15.	I believe that accessibility of online courses is important and want to be able to accommodate student needs that arise.	2.01	Disagree
	Weighted Mean (Overall)	***2.91***	***Agree***

However, the least on this category was on being accessible to their students on a normal premise for questions and help with 3.51 which is strongly agree. On the other hand, on communication and organization the highest mean rating was that teachers are able to communicate their desires around interest, attitude, and work quality to their students with a mean rating of 3.45 also interpreted as strongly agree. This is true as this is made possible through the use of various social media such as Facebook messenger, or group chats and even emails. This are some of the online technology tools that teachers could utilize to effectively provide quality education at its best. It is at most of interest that majority of them can be able to make assessment of students' performance and even behavioral aspects even through online learning and as such this would help better understand that online teaching/learning can be an important key player in this new normal educational modality.

However, the least on this is that they accept that openness of online courses is critical and need to be able to accommodate students' needs that may emerge with only 2.01 and interpreted as disagree. This is premised on the assumption that teachers are not in conformity to online course as accommodating to the needs of the students as there are instances that they could not be able to capture enough from them unlike traditional face-to-face instruction. However, this is in fact based on their perception as they are currently shifting towards distance education. It can also be surmised that most of them have limited technical know-how as not many of them can be able to utilize web resources as assets for their teaching instruction that they could do online. This implicates to their limitation and most likely increase educational gap towards enhanced instructions utilizing online learning.

The advancement of education through instructors who are prepared based on their capability on ICT utilization advances and their planning utilizing online assets would be an exceptional lift to the standard of instruction. In fact, not only teachers but students are all excited on what is new and this development with the secondary education where students and teachers are currently exposed on this new paradigm shift would lead to set new standards in the educational system. However, not all students effectively carry it out as some who do not have the right set of behavior such as being self-regulated and having learning autonomy have difficulty in this aspect. [15] In fact, not all students are fond of online distance learning which can be attributed to different factors and environmental conditions. Some of them feels difficulty coping with the lessons as some are not comfortable with online instructions. This are shown in many studies and some of them believed that online distance education induce mortality and drop-outs in education. However, with proper training and education especially those teachers who could provide more interactive, meaningful, and interesting way to teaching online, it is hoped that this difficulty would soon be minimized if not totally removed. Another limiting factor is the technological gap which is mostly an issue that brought by poverty and availability of technology at home.

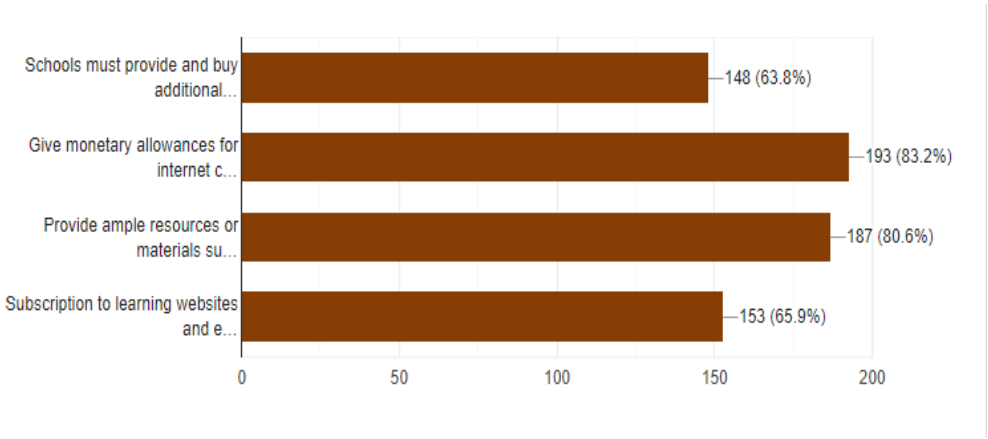

Figure 1.Suggestions of teachers on blended learning

In fact, based from Fig. 1, it revealed that most of the teachers are concerned about the financial implication of the online learning even though the concept of online learning is flexible/blended there is the worry that at some point most of them do need to set-up internet connectivity at home which do have an impact on their financial capacity as a teacher. In fact, the notion of readiness explores financial factors aside from the psychological, sociological, environmental, human resource, technology, equipment and content readiness for e-learning. [16] However, in the case of blended learning most of the teachers especially in the secondary level in the public schools under Kto12 choose to utilize the modular distance learning approach which use modules to

distribute and retrieve the same for convenience. Under this condition, teachers have limited interaction with students but from time to time use Facebook or FB Messenger/Group chats to send instructions and messages to the students. However, there is a digital divide for those household who have and who have not especially those that cannot avail internet connection or do not have gadgets at home to sustain communication with the teachers, students, or with the other parents. This is the real scenario that is happening not only in Camarines Norte but around the country as well. The more is the need for the government to close technological gap through various measures and strategies that would alleviate this matter. Some households however, finds some alternative measures such as Wi-Fi cost sharing as they are paying subscriptions by dividing the cost with their neighbors as to limit their expenditures. It is only hopeful that internet services could reduce the cost of subscription without affecting performance of their services.

Moreover, in Table 4 the significant difference on the online readiness of the secondary teachers were determined based on their responses on three aspects of online readiness in this study such as technology, teaching, and communication and organization. This is essential to understand which among these sources affect much their extent of readiness and be able to pinpoint which among these key elements they should focus in order to improve the area thereby improving online readiness of teachers in the secondary level. On technology and teaching, it can be observed that there is a significant difference since p=000 which is p<0.05 which rejects the null hypothesis. The same findings can be seen on technology vs communication and organization and teaching vs communication and organization with p=0.003 which p<0.05 therefore, it can be assume the significant difference of the online readiness secondary teachers in Camarines Norte.

Table 4. Two-Way ANOVA on Significant Difference on Online Readiness of Secondary Teachers

Sources	Sum of Squares	df	Mean Square	F	Sig.
Technology vs Teaching	20.422	2	10.211	52.434	.000
Error	44.595	229	.195		
Total	65.017	231			
Technology vs Communication & Organization	3.817	2	1.908	5.941	.003
Error	73.563	229	.321		
Total	77.379	231			
Teaching vs Communication & Organization	3.822	3	1.274	4.747	.003
Error	61.195	228	.268		
Total	65.017	231			

The secondary teachers vary in their opinion when it comes to their online readiness, it can be attributed to their desire for technological advancement and the pedagogical knowledge to integrate digital technology to effective teaching and learning. [17] However, the teachers themselves have skepticism when it comes to the use of online teaching that is why they opt for blended and flexible learning and most of them choose a modular approach. This was partly due to poor internet connectivity; variations of different teaching methods used by teachers in their subject, slow personal computers which are not favorable to learning, limited broadband and mobile data that the students can only afford. [18] Hence, it is with proper planning, preparedness, and enough study and initiatives that online learning can be embraced by the growing population of learners who are using every resource possible to continue learning despite the challenges of pandemic.On the contrary, although majority of the teachers have difficulty adapting to online learning classes and have various understanding of the different modalities and learning styles to follow there are many options that they could choose which can be alternative delivery modes sustaining education in this time of pandemic. In fact, some schools could adapt and subscribe to these technologies to enable teaching-learning under distance learning become possible and sustain delivery of quality education. In any case, most of the challenges in instruction in a distance learning environment related to instructional method includes the utilization of ICT that are within the distance instructional techniques, needed resources in the preparation of virtual environment, creation of commonly used exercises, adequate source of information and prepared online assets, minimal space for directions materials capacity, need or have negligible control of the learning stage, confront intrusions in web service, and have constrained budget for the development of instructional assets. [19]

Some of the recommendations which was mentioned in the study of Francisco & Barcelona (2020) captured open and free technology that teachers can use. Some of which are CourseSites which is an online platform which has no license fee or hosting fee that could enable faculty members in K-12 and higher education post course materials, communicate with students, encourage collaboration, monitor performance, and manage grades. [20] One example is Blackboard which has also a commercial learning management system (LMS) that could help institution produce quality distance learning environment. Another is iTunes U which deploy training course through mobile. It helps in home activities, authoring, automatic grading, forums and discussions online.

There is also the so-called LatitudeLearning which is also an online-based learning management system which also supports online education with some eLearning content and support which the user can be able to achieve. Another is the Myicourse which is also an online educational solutions for the teachers who would like to house multiple courses. Meanwhile, Schoology is also a good platform which is free learning management system that allows teachers and students can prepare and submit learning materials and assessments. A Tutor also as an LMS caters online course management but this is effective for the blind and visually impaired people. Other LMS are Dekeos and Moodle which can cater customizable courses, can generate virtual classrooms, certificates, and measure of success. Aside from monitoring students' progress, some of these LMS are mobile friendly which means it can be accessed by those students who do not have a laptop or desktop computers but rely mostly on their smartphones or relative gadgets. [21] These open and free technologies are some of the many platforms that public secondary teachers as well as teachers in general could utilize to help them cope with their online learning management.

IV. CONCLUSION AND FUTURE WORKS

The effectiveness of a teacher lies also in their capability to utilize resources and carry out tasks with due knowledge and capacity while managing aspects related to academic jobs and services to its utmost prime. Most of the teachers are highly motivated and very excited in the use of online resources and the use of technology in teaching and learning. This implicates their behavior of embracing technology as a way to extend learning especially during pandemic. However, these teachers were unable to manage properly online resources because of their limited knowledge to fully utilize ICT technology to its extent while social media is one of their tools in engaging students to learn even though they have reservations in using such platforms.

Some of the educational strategies that teachers could adopt is the training on online module/learning material development and the issue regarding copyright laws for teachers to develop the initiative of ensuring that they are do away with plagiarism. Although, these teachers have basic training and knowledge on the use of basic ICT tools like office software bundles, can be able to access the internet and have accounts of their own most of them are not comfortable with its use. The researchers highly recommended training, planning, and restructuring towards strengthening technology utilization, access, and resource generation for better delivery of education. These activities may prove vital towards developing key-in educational strategies in building smart ways and reducing challenges in online education.Various technological platforms which are mostly free can be of use as an alternative educational delivery for distance and remote learning which schools can either subscribed for effective delivery of flexible and blended learning. The school administration can also conduct various training efforts to train trainers that could be utilized to train others especially the users of learning management systems for its effective implementation in the schools. An ICT unit can also be formed to help teachers in case technical difficulties are met before, during, and after its implementation. Furthermore, teachers can also acquaint with some other technological tools and open source/free software that they could download or implement online to help them in their class management. However, they should be aware to consider acknowledging their sources and avoid plagiarisms and soliciting content unsuitable for teaching and education. They should also confirm validity and authenticity of their sources as to avoid using resources that maybe substandard, fake, or inappropriate for learning.

Future work and studies could be directed towards students' online readiness relative to understanding whether they have the capability to be able to keep up with the challenge of online learning in the basic education level as well as develop ways of standardizing policies and implementing rules and regulations (IRR) that would improve the current system especially during this COVID-19 pandemic.

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