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Flexible Learning Adaptabilities in the New Normal: E-Learning Resources, Digital Meeting Platforms, Online Learning Systems and Learning Engagement

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Abstract: The Covid-19 pandemic has forced the educational systems to shift from traditional learning to flexible learning. Flexible learning is a combination of digital and non-digital technology that ensures the continuity of inclusive and accessible education in the form of online, offline, or blended modes of teaching and learning processes. This descriptive study determined the learning tools and e-learning resources, learning platform and online learning systems, skills towards learning platform and online learning systems, and learning engagements of students of Cavite State University - Silang Campus (CvSU-SC) amidst the new normal setting of learning. Using stratified random sampling, there were 364 student-respondents represented by four departments who answered the structured questionnaire online using Google Form. The findings revealed that smartphones and mobile applications were the most utilized educational tool and e-learning resources. Google Classroom was the most widely used online learning system during asynchronous classes, while Google Meet was a meeting platform during synchronous scheduled classes. It was found that students' skills towards online learning systems and meeting platforms were proficient. During flexible learning, Facebook was on top of the most convenient, followed by Google and Zoom as perceived by students as accessible, equitable, communicative, monitorable, and sustainable to use. Consequently, it was found that students strongly agreed on preparedness as the most vital to engagement in online learning. Accordingly, findings suggest that strengthening online teaching and delivery of methods by creating content tailored to the needs of the students during flexible learning will propel to ensuring the efficacy of teaching and learning processes. Various suggestions were offered for key players in education in addressing the challenges of online learning.

Keywords: flexible learning, online learning, meeting platforms, online learning systems, learning engagement, COVID-19

Highlights

What is already known about this topic:

- Conventional teaching and learning processes have been migrated to online and adapted by academic institutions to continue the temporary closures of schools due to pandemic.
- Academic institutions utilized Web 2.0 designed by external organizations and/or integrate their own learning platforms in facilitating online learning amidst the covid-19 pandemic.
- Appropriate utilization and integration of ICT help learners and educators to collaborate and connect and become significant components of learning in the 21st century.

What this paper contributes:

- The students utilize online resources and educational tools that are accessible, convenient to use and engaging to learn.

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- The meeting platforms during synchronous and online learning systems during asynchronous classes are accessible, equitable, monitorable, communicative and sustainable.
- Students' learning engagement enables faculty to realign approaches and modalities in teaching in the new normal.
- Media literacy is a competence that is indispensable to a student's achievement. Through this, teaching and learning process during the new normal is engaging and simulates the surroundings and students' behavior during this method of teaching and learning.

Implications for theory, practice and/or policy:

- Educational institutions should implement a robust platform that will integrate, collaborate, and allow students interaction in online learning.
- Various teaching strategies should be revisited and design a course content appropriate to the needs of the students during online learning.
- Unified policy guidelines across all programs may be crafted using available platforms for teaching and learning.

Introduction

The higher education landscape has changed remarkably since the introduction of technologies in the 21st century. These have been in the form of changing the ways teaching and learning are delivered in educational institutions that realigned most curricula. Downs (2016) stated the two most significant changes were the increase of non-traditional students whose learning needs mostly depend on collaboration and integration, and, a rise in instructional technology that challenges teachers in the delivery of instruction. These changes were reinforced during the spread of Coronavirus disease in the last month of 2019 when the World Health Organization (WHO) declared the global pandemic in the first quarter of 2020 which forced governments to implement lockdown and social distancing policy that disrupted the traditional methods of teaching and learning (WHO, 2020). The Philippines has not been exempted amongst most countries that are stricken by the pandemic inevitably that have made the temporary closure of some establishments, educational institutions, limited transportation, etc. The Philippine government thru the Inter-Agency Task Force (IATF) has identified and delineated essentials and non-essentials workers to address the issue of who is allowed to go to work and who will remain at home being quarantined. These all resulted in a decline in industrial production, shift from office-work to work-from-home set up of business process organizations, adjustments of the academic calendar, and limitations of movement of the workforce in the communities. Temporary closure of academic institutions has paved the method of online learning wherein both faculty and students were sent home to continue the academic activities using online platforms. Aguilera-Hermida (2020) stated that this action of academic institutions supports the government's action to delay the spread of the COVID-19 virus and to protect students and faculty while ensuring a safe and healthy environment for learning at home. The immediate response of educational institutions to continue learning leads to the implementation of flexible learning. Cassidy et al. (2016) defined Flexible Learning (FL) as "is a pedagogical approach allowing for flexibility of time, place, and audience, including but not solely focused on the use of technologies". Hence, the Commission on Higher Education [CHED] (2020) introduced flexible learning thru the CHED memorandum order (CMO) no. 04 series of 2020. It adapted and promulgated guidelines on flexible learning to be implemented by private and public higher education institutions (HEIs) beginning AY 2020-2021 and shall continue in the school year 2021 and thereafter. This led academic institutions to migrate from face-to-face to online learning. To cope with and to meet the technical requirements of online learning, educational institutions made efforts to capacitate their faculty on flexible learning and teaching options, approaches, strategies, pedagogies and modalities conducted in a form of webinar series. While faculty have been experimenting with online learning, the administrators of academic institutions have been designing learning platforms in response to the call of using technology. Thus, the use of internet technology in business and academic processes becomes the new normal.

Consequently, flexible teaching and learning explore different modalities of instructional delivery online. Adedoyin & Soykan (2020) mentioned synchronous and asynchronous as two types of online learning. Online learning in terms of synchronous, real-time lectures and time-based outcomes assessments, or asynchronous, delayed-time activities, like pre-recorded video lectures and time-independent assessments has been adapted by universities during the pandemic (Joaquin et al., 2020). The teaching and learning process online is driven by the needs of the teachers and the learners. This is considered as the development of online learning with the use of technologies for it offered cost savings for the learners, teachers, and the institution, increased flexibility of teaching and learning, and improved accessibility to education (Kirkwood & Price, 2013). In the new normal setting, students and teachers agree to use a variety of e-learning resources (e.g. digital library, mobile applications, YouTube) with students using available tools (e.g. desktop computer, laptop, tablet) and integrate their lessons into online learning systems also known as Learning Management System (LMS) and meeting platforms (e.g. Edmodo, Google classroom, Zoom, Google Meet) for teaching and learning processes. With the current situation, school policies are revisited and revised (e.g. considering students' economic situation, weak internet connection, availability of gadgets). Mutual understanding of leniency of submitting course requirements and giving considerations not to give failing grades to students become apparent. Adedoyin & Soykan (2020) considered these shifts of online teaching and learning as a digital transformation that has been present in higher educational institutions. Bond et al. (2018) found that ICT skills are relevant in our current time and situation, therefore, the university management shall look at different facets of the problems and come up with solutions that would not affect the academic integrity and performance of students. Demuyakor (2020) cited that mere posting of lecture materials in an online platform does not constitute online teaching. Academic institutions require robust online platforms and instructors who are digitally competitive (e.g. skills, knowledge, attitude) in performing their administrative, academic, and other attached related functions and duties.

While online learning becomes the new norm during the pandemic, educational tools used by the faculty and students must be accessible, equitable, communicative, monitorable and sustainable for it will assure the student's engagement in learning in the new normal. It is predicated on the belief that students' engagement in the new normal is attentive and motivated to learn and progress in their education. Teachers should be able to observe that students are paying attention, taking notes, asking questions, responding to questions, and reacting (Johnson, 2012). Marks (2000) opined student engagement is important to students' achievement to their social and cognitive development in a class. This could be the same in online learning by integrating real-time interactions using a variety of educational tools. Planning and preparation of learning materials tailored to the needs of the students would invite interaction, healthy course discussion, and guarantee the authentic learning in the assessment of students' achievement are prime considerations for online distance education. Mukhtar et al. (2020) stated that the lack of immediate feedback from students leads to the inability of teachers to authentically assess the students during online learning. Facilitating online learning in the new normal involves either external-assisted migration or external-integration migration. The university may use Web 2.0 platforms designed by an external organization or integrate their current personal online learning platforms into external corporate bodies (Adedoyin & Soykan, 2020). In doing so, academic undertakings during a pandemic will propel in promoting efficiency in university teaching, hence will promote quality education. A provision to make online learning using systems form part of the teaching and learning will ensure flexibility. This will link reality to the learning in which students live. Sharma et al. (2020) mentioned the use of information technology as a solution for educational institutions and as an aid for students in their continuing learning processes during the COVID-19 pandemic. Hence, the study was conducted to (a) determine the learning tools, resources, meeting platforms and online learning systems used, (b) determine the students' skills towards meeting platforms, and online learning systems, (c) determine how students' assess the meeting platforms and online learning systems, and (d) to determine how students are engaged in online learning during the flexible modality of CvSU-SC.

Literature

The Teaching and Learning in the New Normal

Flexible learning as a delivery modality must be adapted in public and private higher education institutions, according to the CHED memorandum order no. 04 series of 2020, to respond to the needs of learners in higher education institutions. For higher education institutions, the transition to online learning as a result of COVID-19 has been a difficult task. Gope et al. (2021) stated that education is inexperienced and susceptible to external threats and that particular measures should be implemented to solve the challenges brought by the epidemic. Several aspects must be considered when the Philippines embarks on a new method of education. Apart from the teachers' competence, the learners' circumstances and situation, and the learning environment's efficacy, as described by Joaquin et al. (2020), we should also incorporate E-learning resources and tools, an online learning system or LMS, and skills to be utilized in the new normal. It is fundamental that educational tools utilized by teachers and students be available, inclusive, interactive, can be observed, and sustainable to ensure students' involvement in learning in the new normal. In addition to that, when utilized appropriately, technology helps learners and educators to collaborate and connect (Bower, 2019). The efficacy of online learning is greatly dependent on the user's level of affirmation (Tarhini et al., 2016). As a necessary consequence, it is vital to examine the elements that influence how people utilize and embrace technology. During times of quarantines and virus epidemics, it appears that online learning is the only feasible option for continuing to learn from afar. This, however, appears to be based on a set of assumptions. It is important to note that online learning is only one type of distance education.

Distance Education and Emergency Remote Education

Distance education may be defined as any type of learning experience in which the learner and the teacher are separated physically (not only by location but also by time). This flexibility allows students to take an active role in their education and aims to provide learning opportunities to all students, regardless of their circumstances (Joaquin et al.,2020). Moreover, students' responsibility for their own learning will define their own goal to learn more, and plan for creative learning (Yilmaz, 2018). In response to the COVID-19 outbreak, all schools have shifted to distance education and online learning as the most popular form (Yilmaz, 2018) and consider emergency remote teaching and learning. As a result of the school closures, lessons at all levels transitioned to a distance-learning approach. Schools and teachers have worked hard to create and deliver online courses via the Internet or television broadcasts, as well as the use of modules. Moreover, according to Bozkurt & Sharma (2021), to ensure the continuity of education, emergency remote teaching and learning were implemented. The Emergency Remote Education (ERE) used in various countries during the Covid-19 lockdowns were generalizations of distance education but did not represent the important distinction between emergency remote education and distance education. They contended that while distance learning is an option, the ERE is a requirement. It is also arguably difficult on the part of teachers and students because of the online restrictions and problems they encountered. As mentioned by Liyanagunawardena & Williams (2021), the teachers were facing various difficulties partly due to the imposed restrictions but in most instances, these were due to the online medium selected to provide lessons.

Digital Learning Environment

Many colleges and universities have recently adapted online learning systems that have set the stage for non-traditional and traditional students and instructors to fulfill everyone's teaching and learning desired outcomes. According to Downs (2016), integration of ICT is not an alternative for institutions to consider, but a significant component of learning in the twenty-first century. This viewpoint proves Travis and Price's as cited in Hussein's (2011) claim concerning the utilization of technologies in higher education course delivery, emphasizing that the actual struggle for faculty is establishing their attitude in the delivery and management of instruction and as highlighted by Ulanday (2021). Higher education institutions must equip students with the necessary expertise including technological skills, for them to obtain a better career when graduated. The technological advancement for teaching and learning is reshaping the educational system, enhancing it into a more substantial and expansive structure and

framework. Similar to Hampel (2014), educators and learners are encouraged to use and adapt technology to manage enormous amounts of technological data. Technology like LMS can be utilized to turn interactive exercises into more active forms that include inclusion, engagement, and social interactions with learners, diversified learning, immediate upgrading of resources, and enhanced evaluation of student progress (Downs, 2016; Hampel, 2014; Malikowski; 2008).

Online learning can take the form of synchronous, actual lectures and time-based outcomes evaluations; or it can take the form of asynchronous, delayed-time activities such as pre-recorded lecture notes and time-independent tests (Oztok et al., 2013). Effective online learning provides a digital teaching-learning process, as well as the advancement of various researches, methods, innovations, concepts, values, and the analysis of standard concentration on good online learning design, instruction, and learning. Hodges et al. (2020), posited that it has been established that effective online learning is a result of rational instruction design and analysis, as well as the use of an organized methodology for building and improving teaching (Branch & Dousay, 2015). According to Adedoyin & Soykan (2020), the global acceptance and experience of contemporary online learning (i.e. emergency remote teaching), as some may call it, will lead to situations where students and faculty will get used to the application of technological device and tools for teaching and learning, and this usage will, no doubt, go beyond school into the place of work. Moreover, despite the sudden migration of instructional delivery to online platforms by universities and other citadels of learning during this pandemic, provided the challenges experienced by faculty and students are well explored and transformed into opportunities. Iit is evident that online learning will be sustained and education will become more hybrid. E-learning may enhance learning quality and boost productivity since it is more effective than traditional methods and is simple to use and learn (Lucero et al., 2021). However, according to Aguilera-Hermida (2020), students who have no prior experience with online learning may believe that it is not beneficial. Some pupils did not have access to technological devices, and/or their family circumstances made it difficult for them to do so. As a result, for future utilization of online learning, it is critical to explicitly convey to students, teachers, and staff that the experience during COVID-19 was an emergent response to a worldwide crisis, but it does not reflect the well-researched area of online instruction. Furthermore, Bower (2019), stated that people have constrained knowledge processing ability, and a variety of learning modalities may cause information overload, diminishing one's ability to obtain new material adequately. In addition to that, according to Sharma et al. (2021), the total efficiency of the emergency remote learning system used during the COVID- 19 pandemic was lower than that of the face-to-face class that was taking place prior to the pandemic. Instructors and students in remote learning classes are overburdened with work while also dealing with issues with internet access and power outages. Furthermore, if students have less belief in the technology they are using or do not have a feeling of academic motivation or social bonds, their learning outcomes may suffer.

E-Learning Resources and Tools

Agreeing to Montrieux et al. (2015), technology as a tool that enhances teaching methods is becoming an increasingly significant facet of the higher education sector. The emergence of desktop computers in educational settings causes the change in how technology is incorporated into online classroom approaches. Moreover, Johnson et al., as stated by Downs (2016), media literacy is a competence that is indispensable to students' achievement. This integration of information and communication has compelled institutions to facilitate educational online delivery. The method of instructional delivery, either online learning, blended learning, or face-to-face learning, all present technological integration difficulties. One of the most well-known integrations is the utilization of learning management systems in a non-traditional approach. Teachers redirect teaching materials to digital information, redesign their engagement to perform in an online setting, and learn new technologies for grade distribution and course administration (Brown, 2017). In addition, Balta & Duran (2015) stated that there is a perpetual need for the use of technology in higher education courses. Consequently, most schools and universities initiated and capitalized on the use of technologies and tools in online classroom management. Smartphones

allow students to access online learning venues, access instructors' courses and communicate effectively with their classmates and instructors.

The use of a smartphone as a learning tool improves remote education teaching and learning (Darko-Adjei, 2019), which is true of the participants' present situation during the pandemic. Although there are drawback to the use of cellphones (e.g. easy distraction owing to quick access to games, YouTube, and so on), they provide a grossly unfair learning environment. Using cellphones, according to Holland and Kellog (2020), helps maintain the communication channels open for both the educator and the students. Learning information exchange can be engaging since students can use the camera to watch one another and teachers can use text images to express their lesson. As a result, enabling people to share their ideas and learn from each other, fosters a sense of community. Students who use laptop computers for online learning, on the other hand, can type more quickly and accurately because they can take notes faster than they can with cell phones. Moreover, mobile learning may be able to alleviate some of the worries about connectivity and accessibility. Regular capacity-building activities and skill improvements on the E-Learning System and other relevant software and tools should be conducted among faculty and students using mobile phones (Caraig et al., 2021). The major goal of Google Classroom, according to Okmawati (2020), is to simplify the process of exchanging files between teachers and students, making the shift from face-to-face to online learning fairer. Its design caters to instructors' and students' ways of thinking and working, making it adaptable to ensure that each student receives exactly what they require throughout online learning. Tinungki & Nurwahyu (2020) noted its conveniences (e.g. Google Drive, Google Docs, Sheets and Slides, and Gmail) in converting physical classroom resources to digital ones. However, Wan Hassan et al. (2020) identified one of the obstacles of utilizing Google Classroom for learning as the difficulty of submitting assignments. This may be linked to the students' financial situation, poor internet connections in remote locations, expensive internet connectivity prices, and a lack of ICT infrastructure in some sections of the students (Santiago et al., 2021). In addition, it was found that studying online has benefits in terms of flexibility in time, location, and access to up-to-date content; but, internet speed was still a major challenge (Gaba et al., 2021). Moreover, the usage of Google Meet in the teaching and learning process during the new normal is engaging and simulates the surroundings and students' behavior during the conventional way of teaching and learning. Setyawan et al. (2020) discovered that using Google Meet to gain knowledge is effective. The audio-video components of online learning procedures involve students directly communicating with teachers, comprehending the course, and asking questions utilizing platform capabilities. This will influence learners' academic achievement, either directly or indirectly.

Regardless of the multiple challenges it brings, the emergence of COVID-19 caused us to reconsider not just the technologies for delivering education (Kim, 2020), but also the motivation of students to persevere despite the numerous difficult tasks they must complete each day to succeed in remote learning amid the present crisis (Rotas & Cahapay, 2021). The government should develop and implement clear measures to promote and help learner’s and teachers to adapt to the “new normal” of education. Moreover, according to (Xiao 2021), it is far from the required context of the United Nations 2030 agenda to support that everyone will have access to education, regardless of socioeconomic status, gender preference, age, ethnic origin, physiological well-being, and so forth. What is important is that everyone has access to the type of education that is considered suitable to their learning, ways of learning, and learning environments of an individual.

Methodology

Research Design

This quantitative research employed a survey research design. Check & Schutt as cited in Ponto (2015), defined survey research as "the collection of information from a sample of individuals through their responses to questions". Hence, Toepoel as cited in Demuyakor (2020), mentioned that online surveys are one of the effective and cost-saving ways of getting authentic data from the population online. An

online survey was used as it involved minimal cost and responses gathered are highly accurate. The researchers asked permission from the campus administrator to conduct the study then sent the survey questionnaires online to the study respondents using Google Form. Informed consent was included in the form in accordance with the Data Privacy Act.

Instrument

The instrument used was a self-made questionnaire of the researchers. It underwent three phases of validation such as construct, content, and face validity. A pilot testing was conducted on 40 random samples of study respondents. The utilized questionnaire has consisted of two parts.

Part 1 asked about the e-learning resources (e.g. e-books, YouTube) and tools (desktop computer, laptop), online learning systems (e.g. Edmodo, Moodle), and digital meeting platforms (Google meet, Zoom) used including their corresponding skills towards it, and personal assessment on the online learning systems and digital meeting platforms (e.g. accessible, equitable, communicative) used during the new normal. The skills towards online learning systems and online learning platforms were assessed using a 5-point Likert scale from 5 – 1, with 5 being the highest. The distribution of scales are: 4.20 - 5.00 Proficient, 3.40 - 4.19 Advanced, 2.60 - 3.49 Intermediate, 1.80 - 2.59 Basic, 1.00 - 1.79 Novice.

Part II of the questionnaire asked about the learning engagements and strategies to cope and meet the needs of learning in the new normal. Questions asked were related to students preparedness for online learning (e.g. “gadgets have enough battery, installed software”, “well-oriented with the modalities”, “understood the expectation”), flexibility during online learning (e.g. “able to make flexible decisions when the need arises”, “adapting to changes”, “compliance to the course requirements”) resourcefulness (e.g. “attending webinars to further the learning”, “maximizing the features and functionalities of online learning platforms”), online engagement (e.g. “attending webinars for improvement”, “the platform used is engaging”, “active participation in online class”) and reflectiveness (e.g. “coping up with the challenges”, “appropriateness of learning methods in the new normal”) of student-respondents in dealing with the difficulties.

The reliability testing obtained a Cronbach alpha test result of 0.936 for the learning engagement of students. The mean ratings were interpreted using a 5-point Likert scale and described based on their level of agreement on the given indicators as follows: 4.20- 5.00; Strongly Agree, 3.40- 4.19; Agree, 2.60- 3.49; Somewhat Agree, 1.80- 2.59; Disagree, 1.00- 1.79; Strongly Disagree.

Sampling

Table 1. Distribution of student-respondents according to the department, year level, and sex.

Department	N= 364	Year Level		Sex	
Teacher Education Department	67 (18%)	First Year	71 (19%)		
Department of Information Technology	99 (27%)	Second Year	129 (35%)	Male	113 (30%)
Department of Management	156 (43%)	Third Year	77 (21%)		
Department of Arts & Sciences	42 (11%)	Fourth Year	87 (24 %)	Female	261 (70%)

The total population enrolled during the first semester of A. Y. 2020-2021 at Cavite State University – Silang Campus was 3988. Using Slovin’s formula with a 5% margin of error, it obtained 364 study samples. After using Slovin’s formula, stratified random sampling was used to divide the samples into mutually exclusive subgroups of four departments and their year level. It comprised of 67 (18%) samples from the Teacher Education Department, 99 (27%) samples from the Department of Information Technology, 156 (43%) samples from the Department of Management, and 42 (11%) samples from the Department of Arts and Sciences. The year level distribution is as follows: 71 (19.51%) first year, 129 (35.44%) second year, 77 (21.15%) third year, and 87 (23.90%) fourth-year students. There were 113 (30.2%) male student-respondents and 261 (69.8) female student-respondents.

Data Analysis

The data were coded, collected, analyzed, and interpreted. Descriptive statistics used were mean, frequency and percentage. Mean was used to assess the skills of students towards online learning systems, the meeting platform, and learning engagements in the new normal. Frequency and percentage were used to present the e-learning resources and tools, the digital tools used, online learning systems, and meeting platforms.

Limitations of the Study

The university adopted the two different modes of flexible learning amidst pandemic; online and offline. The teaching and learning processes during online learning took place with the use of the internet and online classrooms using digital format of learning materials. Students who have no internet connectivity have opted for offline learning which is done through printed modules. This study is limited to describing online learning of students at Silang Campus as one of the flexible learning adaptabilities of the university in the new normal. Hence, the subjects of the study were from only one campus of the university which is a threat to the external validity. This study could have yielded better or different results if students from 11 other campuses had been reached.

Findings and Discussions

Table 2**.** E-Learning Resources and Tools used in the new normal

E-Learning Resources and Tools	Frequency	Percentile
Desktop Computer	43	4.95%
Laptop	153	17.61%
Tablet	7	0.81%
Smartphones	335	38.55%
Electronic Books	10	1.15%
Podcasts	1	0.12%
Digital Library	3	0.35%
Mobile Applications	145	16.69%
Electronic Journals	7	0.81%
Youtube	131	15.07%
TedEd	8	0.92%
Others	26	2.99%

It was found that students were using smartphones (38.55%) and laptops (17.61%) during online learning. This implies that these e-learning resources and tools are more accessible to them. Using smartphones provides flexibility that made the learners access online learning platforms and the course provided by the instructors; which also allows them to interact with their classmates and instructors. The use of smartphones as a learning tool enhances teaching and learning in distance education (Darko-Adjei, 2019) and this is true to the current situation of the respondents during this pandemic. Although, there are constraints in using smartphones (e.g. easily distracting due to accessibility with games, Youtube, etc) that make the learning environment inequitable. Holland & Kellog (2020) mentioned its importance that using smartphones may maintain a communication line open both to the teacher and the learner. The sharing of learning can be engaging since the students can use the camera to see each other while the teachers may use text pictures to present his/her lecture. Thus, it builds a community by creating an opportunity to share their thinking and learn from each other. On the other hand, the use of laptops of students during online learning allows students to type quickly and accurately for they can take notes much faster than using smartphones. The use of laptops can help students stay organized and easily review their work all in one place, to edit, change and copy their work, as well as to send their work via email (Soffar, 2020). To augment their learning, mobile applications (16.69%) and YouTube (15.07%) are the widely used online learning resources. Students learn in mobile applications comfortably as these tools answers quickly from the internet. Learning from mobile applications provides a convenient and intuitive learning experience. Meanwhile, Schaffhauser (2020) asserts the use of Youtube is the most utilized learning resource during the pandemic. Youtube offers a variety of learning

materials that may help users to find solutions to their school works and to gain new knowledge and skills. Moreover, Yaacob & Saad (2020) mentioned that learning on YouTube is more flexible, interesting, and interactive and will improve their cognitive and psychomotor aspects through using various manageable functions (e.g. downloading, sharing, skipping advertisements). Lausa et al. (2021) also reported that Youtube was the most utilized and satisfying educational learning platform and one of the primary sources of information for students for their assignments and school-related works. A few were recorded as students who were using tablets (.81%) and desktop computers (4.95%) during online learning while there was about 0.12% to < 2% recorded for the e-learning resources.

Table 3**.** Online Learning System and Skills towards it

Online Learning Systems			**Skills towards Online Learning System**	
			Mean	**Verbal Interpretation**
Edmodo	62	9.78%	2.49	Basic
Google Classroom	318	50.16%	4.29	Proficient
Facebook	209	32.97%	4.29	Proficient
Moodle	3	0.47%	2.53	Intermediate
U-LMS	19	2.52%	3.28	Intermediate
Others	7	1.10%	3.37	Intermediate

Scale: 4.20 - 5.00 Proficient, 3.40 - 4.19 Advanced, 2.60 - 3.49 Intermediate, 1.80 - 2.59 Basic, 1.00 - 1.79 Novice

For the online learning system, the Google Classroom (50.16%) was the most widely used during flexible learning. It can be noted that their skills towards the platform are proficient. This may be attributed to the popularity, simplicity, and accessibility of the platform for it allows faculty to create, distribute and grade students' work. Again, students were using smartphones to access their online classes. This could be the most used by faculty and students for it does not require a big amount of data for them. Also, Google Classroom offers digital collaboration and permits information storage such as learning modules, assignments posts, immediate feedback (e.g. grading students' work), return students' work, post comments, and communicate between users. Okmawati (2020) mentioned the primary purpose of Google Classroom is to streamline the process of sharing files between faculty and students which makes the transition from face-to-face to online learning equitable. Its design is intended for teachers' and students' ways of thinking. It works flexibly, ensuring that every user gets what they need during online learning. Tinungki & Nurwahyu (2020) cited its conveniences (e.g. Google Drive, Google Docs, Sheets and Slides, and G-mail) which translates physical materials used in the classroom to digital formats. However, Hassan et al. (2020) reported the difficulty of submitting assignments as one of the challenges in using Google Classroom for learning. This can be attributed to the economic situation of the students, weak internet connection in the rural areas, high price of internet connectivity, and the lack of ICT infrastructure in some areas of students' locality (Santiago et al., 2021). Moreover, Sharma et al. (2020) mentioned internet bandwidth, availability of devices, online resources, and mobile data connection as key challenges during online learning. Nevertheless, the use of online learning systems continued to rise due to the demand and its features on functionality, flexibility, and accessibility (Abuhassna et al., 2020). Facebook (34%) with corresponding skills as "proficient" on the other hand, is also used due to its functionality to post videos and photos, create private groups for students, and provide direct communication with the teachers. As a social networking website, it enables enhancement and support of teaching and learning processes. It was also used as an e-learning platform for it allows one to discuss ideas, ask questions, share experiences, and discover new information (Pappas, 2015). To support this, Espinosa (2015) mentioned one of the advantages of FB for students is its promotion in human interaction. It makes teaching and learning more practical, interactive, and holistic; hence, promoting cooperation in learning. A few were recorded for other online learning tools, Edmodo (9.78%) with basic skills towards it. Moodle (0.47%), Learning Management System of the university (2.52%), and others (1.10%) with corresponding skills of "intermediate" respectively.

Table 4**.** Digital Meeting Platforms and Skills towards it

Digital Meeting Platforms			Skills towards the Digital Meeting Platform	
			Mean	**Verbal Interpretation**
Skype	17	0.3%	3.77	Advanced
Google Meet	358	78%	4.51	Proficient
Zoom	11	2.40%	3.21	Intermediate
Discord	26	5.66%	2.86	Intermediate
Webex	14	3.05%	3.39	Advanced
FB Messenger	33	7.19%	4.25	Proficient

Scale: 4.20 - 5.00 Proficient, 3.40 - 4.19 Advanced, 2.60 - 3.49 Intermediate, 1.80 - 2.59 Basic, 1.00 - 1.79 Novice

During online classes (synchronous), Google Meet (78%) were widely used by students who were also found proficient as they had accompanying skills towards this meeting platform. This can be due to the fact that Google Meet is accessible and compatible across devices. Teachers create meeting rooms and send the links to the students, share the presentation to the participants and use the moderation feature to control (e.g. remove, mute, deny, message the student, etc) participants. The use of Google Meet in the teaching and learning process during the new normal was engaging as it emulates environment and students' behavior (e.g. facial expression, body language, intonation) as same as the traditional method of teaching and learning process. Setyawan et al, (2020) found that the use of Google Meet was effective in building knowledge. The online learning processes involve audio-video aspects where students communicate to teachers directly, comprehend the lesson and ask questions using the platform features. This will contribute to the impact on the academic performance of students directly or indirectly. Adnan & Anwar (2020) cited the result of the sudden shift from conventional learning to online learning as a completely different experience for students and may not be as effective as expected. A few of which were the lack of interaction, the response time, and the socialization present in the conventional method of learning. Abuhassna et al. (2020) emphasized prior experiences in using online learning platforms as an important aspect in strengthening students learning experiences. The use of different meeting platforms may depend on the teachers' preference, features, and functionality that the teachers would want to maximize during the online learning. Evidently, a few were recorded for other meeting platforms. FB Messenger (7.19%) with proficient skills towards it, Skype (0.03%), WebEx (3.05%) with advanced skills towards it, Zoom (2.40%), and Discord (5.66%) with corresponding skills of "intermediate" respectively.

Table 5**.** Assessment of Online Learning System and Digital Meeting Platform

	Assessment of the Tools Used									
	Accessible	**Freq**	**Equitable**	**Freq**	**Communicative**	**Freq**	**Monitorable**	**Freq**	**Sustainable**	**Freq**
Edmodo	37	5.85	40	8.47	36	4.62	74	12.71	38	11.28
Google Classroom	21	3.32	31	6.57	34	4.36	46	7.90	32	9.50
Facebook	166	26.22	66	13.98	137	17.56	91	15.64	38	11.28
Moodle	18	2.84	43	9.11	38	4.87	36	6.19	34	10.09
University LMS	51	8.06	50	10.59	60	7.69	43	7.39	32	9.50
Skype	28	4.42	28	5.93	73	9.36	26	4.47	19	5.64
Google Meet	146	23.06	80	16.95	127	16.28	114	19.59	55	16.32
Zoom	107	16.90	66	13.98	182	23.33	54	9.28	29	8.61
Discord	17	2.69	15	3.18	33	4.23	28	4.81	18	5.34
WebEx	22	3.48	19	4.03	26	3.33	21	3.61	16	4.75
Others	20	3.16	34	7.20	34	4.36	49	8.42	26	7.72

The accessibility (26.22%) on using Facebook for online learning was convenient and easy for the students to engage and participate in the learning activities. Hassan (2014) implied that the majority of students quickly respond on time to posts and share information necessary for their formal and informal education. Likewise, Google (23.06%) and Zoom (16.90%) have been also utilized as potential alternative tools depending on the needs of the learners (e.g. using its special features). Further, for students to be equitable and receptive in online learning activities even without a reliable internet connection, the Google (16.95%) platform was used. As mentioned by Okmawati (2020), the Google platform was designed as a tool for free collaboration of teachers and students to create and distribute assignments and other school-related activities. Hence, the interaction of professors with students will be facilitated in the virtual world through other platforms like Facebook (13.98%) and Zoom (13.98%). Direct participation of the students among themselves and instructors, Zoom as a (23.33%) platform clearly identified an effective communicative tool for online learning. UNESCO as cited in Basilaia & Kavavdze (2020), implied that the Zoom cloud platform supports video and audio conferencing, chat, and webinars, which will evidently give growth popularity in many schools (Basilaia & Kavavdze, 2020). Other platforms that have a direct live chat: Facebook (17.56%) and Google (16.28%) consider available e-learning tools that will integrate a wider and better enriching online experience (Thakker et al., 2020). As for teachers to closely monitor their students' activity and progress of the school works, it has been found that Google (19.59%) is relevant and ideal in automated reporting. It has the potential to measure the progress (A'yun et al., 2021) of the students' activities and was designed to organize and make assignments paperless. The sustainability assessment of the online platform shows that Google+ (16.32) got high results, and this implied that the application has learning features for a long-term solution. Sudarsana et al. (2019) mentioned that the storage of the submitted school documents, assignments, and materials can be conveniently seen and checked without a time limit in the Google+ platform. Similarly (Abdelrahman & Basher, 2017), stated that the cloud storage of Google+ provides tools that can access the students' schoolwork in real-time. Moreso, Aýun et al. (2021), stated that Google+ significantly provides benefits to lecturers and students to be used without being completely used up or destroyed.

Table 6**.** Learning Engagement of Students in the New Normal of Learning

Indicators	Mean	Verbal Interpretation
Preparedness	4.22	Strongly Agree
Flexibility	4.12	Agree
Resourcefulness	3.52	Agree
Online Engagement	3.83	Agree
Reflectiveness	4.01	Agree
Overall Mean	**3.94**	**Agree**

Scale: 4.20 - 5.00 Strongly Agree, 3.40 - 4.19 Agree, 2.60 - 3.49 Somewhat Agree, 1.80 - 2.59 Disagree, 1.00 - 1.79 Strongly Disagree

Students' preparedness in online learning ($\bar{x}$ = 4.22) was the highest to denote "Strongly Agree". It could be apparent that students' learning tools (e.g. smartphones, computers, learning systems, meeting platforms) are all set during flexible learning. They were well-oriented with the teaching modalities and subscribed to the virtual classroom rules including the university policies expected towards them. Preparedness is important as the COVID 19 pandemic continues to keep the Philippine educational system in an online learning mode, thus students need to cope. The transformation from conventional to online learning presents challenges. However, the satisfaction of learners towards online learning as an effective tool for teaching and delivery of methods must be considered. This way, they will be able to grasp new knowledge taught in an online class. Since the COVID 19 pandemic has forced the Philippine educational system to operate in an online fashion, students eventually responded to the call. Noting that Filipino students are ready to demonstrate adequate computer and internet abilities (Reyes et al., 2021), few adjustments were made, and these were more of the approaches of the teachers, modality, and the tools being utilized. However, students were not ready in terms of learner control, which refers to a student's ability to lead his or her learning. Students felt that repeating online educational resources based on their needs was the simplest to agree with in terms of learner control. Meanwhile, one of the

difficulties students encountered was avoiding becoming sidetracked by other online activities while learning online (Reyes et al., 2021).

Subsequently, flexibility ($\bar{x}$ = 4.12), resourcefulness ($\bar{x}$ = 3.52), online engagement ($\bar{x}$ = 3.83) and reflectiveness ($\bar{x}$ = 4.01), all obtained a verbal interpretation of Agree. Flexibility or coping strategy is important to students amidst pandemic. The online class entails many requirements that are prerequisites to pass the course. One of the characteristics a student should possess during online learning is the ability to be flexible in responding to the call of their academic work. Students must be able to make decisions to counter the challenges to be able to keep them engaged in the class. Helping others (e.g. classmates) with difficulty in coping with technology could normalize the current situation, set aside competition, and live in a normal set of conventional learning. Students' adjustments based on the needs of time could lead to achieving their goals. The need to adapt to online learning, (Dhawan, 2020) and assert online teaching is not an option anymore but a necessity so is online learning as well. Joan (2013) mentioned the change of teachers' strategies such as utilizing resources (e.g. interactive software, computers, Web 2.0) in the classroom is challenging on how it is integrated successfully due to the students' ability to gather information faster. The flexibility to provide students with choices on the tools, the systems they could use and resources, study time at their convenience, and how they would want to learn the subject form as part of the learning set during online learning are some of the key factors to be inspected. According to Rotas & Cahapay (2020), remote learning during the COVID-19 crisis presents challenges to students, but it also motivates them to persevere despite the numerous difficult tasks they must complete every day. In order to succeed in remote learning in the middle of the present crisis, Filipino students use a variety of coping mechanisms such as follows; looking for good space and time, borrowing learning resources, seeking support from peers, approaching teachers, practicing time management, doing learning tasks ahead of time, extending the time for learning tasks, diverting attention, regulating the self, taking extra jobs, crying, and praying are the categories of coping strategies that emerged. The end goal is that learners learned from their course as well as from their teachers' philosophies and systems which contributes to promoting quality education during the current situation.

During online learning, unavoidable circumstances might happen that will limit students' abilities to fulfil the requirements. They should be resourceful enough to overcome such limitations by applying problem-solving knowledge to new situations. The skills are the building blocks of the ability to find and use available resources to achieve goals (Price-Mitchell, 2015). This skill is one of the traits that students can enrich so they could be productive in using technology (e.g. attending webinars, video tutorials). This permits them to increase their skills and to find solutions to their assignments and course projects. Students' resourcefulness promotes independence, collaboration, and ownership. It would be valuable to students to learn from their own initiative for it will remain in their cognition in the long run. Hardwick-Smith (2020) stated the importance of resourcefulness during the COVID-19 pandemic as being able to quickly adapt to new or different situations, think creatively, and manage with what is available to them. During flexible learning, on the other hand, may necessitate resources that many of the students lack (e.g. stable internet connection) as required in the synchronous learning sessions. Rotas & Cahapay (2020) mentioned another issue that frequently emerges in students' replies is the lack of adequate learning materials. Most students only have access to their phones and demand additional resources. Others have storage limitations owing to programs such as Zoom, Moodle, Google Meet, and Adobe Reader.

Student engagement is important as it reflects students' commitment to educational goals and learning and is an essential pathway to highly valued educational outcomes such as academic achievement (Christenson et al., 2012). Strean (2011) mentioned a different learning environment brought by online learning. Students may have some level of tension, anxiety, and resistance that needs to be addressed by the teacher; in such a way as integrating a form of humor (e.g. using emojis) to facilitate online learning. It could be a strategy that will motivate learners and engage in online discussion. The role of

the teacher in using online meeting platforms is creating interactive and open communication which fosters healthy relationships towards online learning environments.

Students' remarks and valuable feedbacks on the use of flexible learning are very important. Some aspects affect the competence of learners and students through the learning environment and its efficacy on learning. Learners aspire to adapt and demonstrate appropriate outcomes, behaviors, and perspectives in order to address the daily obstacles associated with distance learning, perceiving education as a universal common good. While engagement is the antidote to hopelessness, coping strategies are the antidote to pressure and stress (Rotas & Cahapay, 2021). According to Chua et al. (2021), in order to meet the lesson's objectives, both instructors and learners must establish motivation and share responsibility. Learners must also think that by using technology, they would be more able to understand and appreciate the lesson. Students must be encouraged to engage in reflective practice regarding their learning and experiences with ICT, as well as their communication and relationship with instructors and classmates, in order to develop a competent classroom. Furthermore, Sahin (2014) stated that the use of ICT as a complementing tool in the learning and teaching process has a favorable impact on student achievement.

Conclusion and Suggestions

Students utilized educational tools available to them such as smartphones, laptops, desktop computers, and tablets and accessed e-learning resources such as mobile applications, YouTube, e-books, among others for their schoolwork at home during the COVID-19 pandemic. Since online learning during pandemic allows flexible learning, students accessed the learning content posted by their instructors in Google Classroom, Facebook, and Edmodo. During synchronous classes, they used Google meet as the priority among all other digital meeting platforms available for free. It is attributed to the fact that their skills towards these meeting platforms and online learning systems are proficient. It was also found that students' assessments on these tools are easy and convenient to use and it allows them to access printable activities without reliable internet or device access. The platform as assessed by students also allows direct communication to instructors, collaborates with other learners, and encourages open discussion. It keeps them informed of their to-do-activities, progress and it emulates a realistic learning environment during face-to-face classes. On the other hand, students' learning engagement is a key factor to thrive in the new normal of learning. It was found that along with preparedness to get into the class (e.g. technology ready), mental preparation sets the tone to learning during the pandemic. It enables flexibility to cope and adjust to the needs, (e.g. course requirements) and find suitable solutions by demonstrating resourcefulness with the educational technology at hand. These reasons are associated with student active participation in online learning and at the same time, finding balance even presented with difficulties in life brought about by the new normal of education. Sharma et al. (2020) assert considerations on the potential to succeed in the implementation of online learning; simple and user-friendly e-learning systems, and adaption of new education policies and regulations. With the wide availability of resources in the classroom, choosing and integrating the right tool is a challenge (Joan, 2013). The situation is similar in online learning. In order to achieve academic success and engagement in the new normal, students require enhancing themselves in technology adaption and utilization while keeping their interest and enthusiasm in learning. It is the common responsibility of teachers to commit to efficiency, allowing students to cultivate new knowledge and critical thinking (Lin et al, 2017). The flexible learning of today could not replace traditional teaching and learning processes, however, it is best to realize that traditional learning can be reinforced with online learning. Players of the educational system have to be creative, flexible, and responsive to the current crisis (Aguilera-Hermida, 2020).

While the pandemic is not yet over, students' interest in online learning must be sustained. Educational institutions may look at how online teaching and delivery of methods can be effectively fulfilled. Finding new and appropriate technology that caters to the learning needs of the students is still a challenge to academic institutions. The following suggestions may be considered in online learning:

- Educational institutions may create a policy guideline on online learning systems and meeting platforms utilized in their institutions. They may integrate their own platform or use readily available platforms whichever is convenient and addresses the needs of the students and the institutions. They may also benchmark and collaborate with other institutions that exemplify best practices on online learning systems. Online learning will continue to progress and be considered a valuable tool in education, hence, educational institutions must be proactive in their approach to flexible learning.
- School administrators must capacitate their faculty not just on how learning content is posted or how meeting platforms are being utilized but by helping them create online learning content that smoothly transitions their classroom-based teaching while realigning their curricula to the new normal of education. It should be part of the strategic plan with clear goals and objectives and detailed activities. They may design key performance indicators and monitoring tools to ensure that activities are performed based on the plans. Activities can be in the form of designing a dynamic, interesting, and interactive course content which is flexible and will guarantee the students' learning.
- Online courses should be designed by teachers in such a way that is creative, relevant, and student-centered, encourage group collaboration and must have an authentic method of assessment. In doing so, it may commence with considering the platform technology that their students' and teachers' computers are capable of. For instance, there is a need to know if they are able to download Zoom, or they would prefer Google+ which uses a lower data connection in terms of bandwidth or they would prefer another one that could cater to their bandwidth limitations. If educators are technically, pedagogically, and content-equipped, they will be able to conquer the challenges and problems associated with modern technologies of the new normal in the academe.
- Students shall respond proactively to the call of change of learning in the new normal. The use of smartphones as learning tools improves remote education in teaching and learning. Results also revealed that students are proficient in utilizing these technologies. However, areas of concern such as financial condition and poor connectivity of the students may be considered.
- For future research, a study on exploring the offline and blended mode of learning may be conducted vis a vis qualitative research on the student's challenges, coping strategies, the academic performance of students, and the efficacy of online mode of flexible learning in the university.

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