How to Cite:

Talosa, A. D., Javier, B. S., & Dirain, E. L. (2021). The flexible-learning journey: phenomenological investigation of self-efficacy influencing factors among higher education students. *Linguistics and Culture Review*, *5*(S3), 422-434. https://doi.org/10.37028/lingcure.v5nS3.1590

The Flexible-Learning Journey: Phenomenological Investigation of Self-Efficacy Influencing Factors Among Higher Education Students

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Abstract---Philippine higher education has been driven by the urgency of alternative learning modalities from traditional to flexible teaching and learning. Much research has already been embarked on flexible learning. New to the platform, this study purports to document and describe the learning opportunities and influencing factors on the self-efficacy of students in a flexible learning set-up. Using In-depth individual interviews as its method, the qualitative study was administered to higher education students who consented to take part in the study. Findings revealed that self-regulated learning and digital or technological self-efficacy are the two themes found as a learning opportunity with the current learning modality. Personal, Technological, Communication, Home Environment, and Teacher-related are the overarching themes that emerged as influencing factors. The findings of this study have generated several implications for teaching practice, technology experts, and other stakeholders that must be considered very seriously as they represent the opinion of the users of flexible learning.

Keywords---flexible learning, new normal, online learning, phenomenological investigation, self efficacy.

Introduction

The pandemic as a global turmoil has affected education at all levels. With all the physical and gathering restrictions, many universities made coherent responses to the dynamics of higher education in the new normal through online learning and or flexible learning E-learning, open learning, distance learning, and blended learning are all phrases that are sometimes used interchangeably when talking about flexible learning (Tucker & Morris, 2012). Regardless of its nomenclature, Mok et al. (2021), had argued that online learning has become a vital tool to supplement classroom activities with a wide range of the internet of things usable and viably available for utilization to enhance management of learning and advancing the ICT skills of both the students and the teachers. Enhanced even further as the best option in the current scenario, online or flexible learning has been nationally and internationally adapted in the continuous surge of the current pandemic. Educational institutions ought to be flexible and professional enough to handle emergency challenges. In fact, the current crisis clearly demonstrates the value of modern technology and stresses the need to adequately plan education schemes and prepare valid alternatives, Oraif & Elyas (2021).

Over the years, technology integration has been regarded as a key field of research, particularly given the potential usefulness of technology use for educational reasons such as individualized learning and ties to good student outcomes. Worth noting however is delving into a study on Transitions to Online learning as an integral component of higher education in the new normal and the online education delivery method must be evaluated as a realistic and viable learning option. The COVID-19 pandemic has driven the implementation of flexible teaching and learning in the Philippine educational system. A paradigm shifts from traditional face-to-face classes to going online did not only conform to the mandate under memorandum circular number 4 series of 2020 of the Commission on Higher Education on Flexible Teaching and Learning but has offered higher education institutions the opportunity to embrace a teaching and learning delivery model practiced in other countries. It has necessitated higher education institutions to collaborate with stakeholders and strengthen a culture of sharing knowledge, resources and best practices (Aristovnik et al., 2020; Barada et al., 2020). For most academic institutions like Cagayan State University, plans to integrate online pedagogy into instruction has swiftly drawn toss-coins between immediate realities and needs versus strategic financial development frameworks.

Cagayan State University is geared to provide a quality education to students through high quality instruction, innovative research, extension, and production. It has launched a new flexible learning study format called Learning Environment Network System (LENS), a blended learning design allowing students to be more flexible as to when and where they study. It reduces classroom learning time, replacing some of it with an e-learning environment for self-study that includes varied instructional tools. Educators and policymakers have recognized the growing necessity to move learning activities from the classroom to online platforms in order to adapt to the current scenario (Toquero, 2020). As a result, online instruction became mandatory, with different platforms being used based on the country's regulation implementation. The challenge according to Alaghbary

(2021), is to be able to use technology's educational potential to help students achieve their desired learning outcomes by creating instructional designs that provide authentic learning experiences for future generations of digitally literate students. The new normal, according to Yazon & Callo (2021), needs equity for all learners in terms of access to technology that supports their learning; nevertheless, the digital divide is widening due to students' limited opportunities in poverty, including those in rural areas. Much studies have been conducted on e-learning. However, new to the educational platform, online learning is appealing because it reflects people's and organizations' dedication to bettering education and exchanging knowledge and skills on a bigger scale. The popularity of online learning is growing, owing to advances in technology and increased demand for admission to higher education institutions, Idrizi et al. (2021).

New to the platform, there is a need to study an assessment of students' self-efficacy. Literature suggests that not all students have the high self-efficacy needed to deal with an unfamiliar online environment, particularly students in their first year of learning. These students often experience cognitive overload during the first week of their studies due to disorientation, new teaching/learning methods, unfamiliar subjects, and the challenge of working with unfamiliar technology. While students possess highly confident self-efficacy levels in the use of computers and a positive attitude towards the utilization of the Internet especially among younger males, and a lower anxiety level on the use of and implications on the challenges of the computers (Tanveer et al., 2020), this may not guarantee the same efficacy and attitudes among CSU students especially in distant learning environments.

Up to date, some studies have explored learners' characteristics in Distance Learning (DL) and found that certain characteristics lend to a better distance learner (Kariippanon et al., 2019; Jariono et al., 2021). In order to deal with online learning, students must have certain skills such as critical thinking skills, collaboration skills, academic writing skills as well as computer and Internet skills. It is important to not only possess these skills, but be also able to apply these skills when needed. Moreover, they must be efficacious in dealing with a learning environment that is different from the traditional classes in which they have previously studied. Some studies show that students with higher confidence in themselves or higher self-efficacy are more likely to perform well and persist in online courses. Karim & Hasan (2020), who looked into the gaps in the paradigm shift from face to face learning towards virtual learning found that teachers and students need to be trained with various online platform.

With this study, the university may devise proper approaches and strategies to address the needs of its stakeholders. The following questions guided this study:

- What opportunities in learning were unraveled in the students journey in flexible learning?
- What factors do students identify as influencing their academic self-efficacy in flexible learning?

Method

The qualitative research design was used in this study. In-depth individual interviews were conducted with the student-participants to explore their insights. The method was based on the phenomenology as the researchers wished to describe their perceptions and lived experiences (Muñoz, 2021; Moore et al., 2011; Dağ & Geçer, 2009). This design is used to describe how human beings experience a certain phenomenon and attempts to set aside biases and preconceived assumptions about human experiences, feelings, and responses to a particular situation. It allows the researchers to delve into the perceptions, perspectives, understandings, and feelings of those people who have actually experienced or lived the phenomenon or situation of interest, or the so-called, "lived-experiences." Applying purposive sampling, thirty-five students, five each from the seven undergraduate programs of the campus who consented to be part of the study served as the key informant. In particular, the participants were 2nd year to 4th year undergraduate students carrying the regular load for the semester (Chitra & Shobana, 2017; Widana et al., 2020).

For the smooth flow of the data collection, the following procedures were carefully carried out by the researchers:

- The researchers briefed the participants about the study and informed them that participation was voluntary. They were given a choice if they wanted to be part of the study or not.
- The Google meet-recording consent form was then presented to them, which asked for their permission for the interviews to be recorded.
- The researcher wished to be transparent, and as a result, the participants were given the interview guideline. The interview guideline was firstly to help them better prepare for the interviews. Secondly, the interview guideline aided in providing information-rich answers.
- The participants were interviewed individually in virtual room. Semistructured, one-to-one interviews were used as in-depth information of the understanding was needed, and also to allow the researchers some degree.
- The recorder was used during each interview. Making use of a recorder allowed the researcher to record fully and accurately what was being said rather than taking notes during the interviews of flexibility in asking questions.

This research considered ethical standards. In so doing, the participants were informed about all the steps that were to be taken in this research. The participants were more important than the study, and therefore always respected. The participants were informed that the study was completely voluntary and would not affect their lives as students and as persons, even their families, in any way. Confidentiality was provided, as the participants' identifying information was not sought. The data collection material was kept and destroyed on completion of the study. In conformance to relevant provisions of the Philippine Data Privacy Law, said recording is stored in a secured data drive for the purposes and aims of the study (Sit et al., 2005; Shen et al., 2013; Ginaya et al., 2018). These recording shall be deleted permanently and no copies shall be reproduced as agreed with the participants after 1 year or upon withdrawal of consent of the participant.

The thematic content analysis was used to analyze the interview data. This analysis method comprised of five steps, namely: transcription, checking and editing, analysis and interpretation, and verification. The data in this study were triangulated, checked with multiple resources, and sorted numerous times to ensure accuracy. Consultation with the participants along the semantics were made, validating the teams' analysis of the participants response. The team worked with a social science researcher to aid in the analysis of the responses made.

Result and Discussion

Framing the general question, "What are the learning opportunities of Flexible learning? Based on the responses of the respondents, two themes emerged as learning opportunities. These are Self- regulated learning, Digital Literacy Skill enhancing Digital Literacy.

Self-regulated Learning. Learners who are self-supervising, self-regulating, love self-exploration, and have open minds, among other attributes, have an impact on the flexible learning effect (Marich & Howell, 2015; Matteucci & Soncini, 2021). They have to exhibit the spirit of spontaneous learning to be able to study independently. As a result, in order to complete the course, learners must have a larger capacity for self-learning. With flexible learning centered on making learners self-responsible, and self-directing towards their learning choices, this yields opportunities.

"One thing I consider as a learning opportunity is self-management and supervision. With online learning, I was able to self-monitor my course submissions, my performance and adjust my learning strategies during the process of learning." said respondent 07 "LENS provided a self-regulated way to manage my courses, augmented by digital tools to help me and other students progresses and performance thru our in-class activities, submissions, and collaborative tasks".

These learners even reflected that by the time the institution adjusted to online learning, the respondents were able to realize learner-centeredness and hands-on real time learning by doing and or autonomous learning. Most of the students believed that they are accountable to their learning now as evident by the response below:

"I felt like my learning is my responsibility in the LENS."

"I create my own performance, so to pass or to fail in my courses is within my control now."

"This pandemic really challenges the education system and all of us are severely affected especially me. as I step in my second year in college, in this new way of learning, I need to really rely on myself because this online learning requires self-study..."

"Since its more self-directed, my progress do not rely upon just doing the tasks and activities - its more of engaging and advancing my potential outside the box and maximizing the digital tools as a competitive advantage."

Albeit difficulty in the first place, learning online provided opportunities for students in their self-pace learning. Online learning provided a leeway for the access of varying resources and references, as it is not confined solely to books and lectures alone. Also, by learning at one's pace provides everyone the ample

time to study their lessons ahead of time. Self-directed learning displays the learner's autonomy who holds the main responsibility on choosing the learning goal and meaning that he or she can control.

Digital literacy

With the onset of online learning as the most viable approach for the new normal academic platform, literacy to manage technologies is of paramount concern. Digital literacy for learning is more than just knowing how to operate the technology, but also having the right information management and critical thinking skills, as well as proper online behaviours, Tang & Chaw (2016).

"I've learned to feed my sole cognition "self-learning by YouTube "and with online learning, I discovered strengths from my weaknesses before."
"Teachers require creation of learning outcomes using videos, while I was not motivated to try apps before, with online learning I developed literacy in manipulating tools like video editing and others"

Research Question 2: What factors do students identify as influencing their academic self-efficacy in flexible learning?

Results revealed that students' experiences during the flexible learning fell into four overarching factor themes, each with related subthemes.

Personal-related factor

Personal factors can also impact on student access and participation in the online learning environment (Stoessel et al., 2015). Commitments such as caring for young children or being called into work can affect the attendance and participation of students in regularly scheduled asynchronous sessions. In the same way that the external student pathway offers increased access, flexibility and convenience in that students can more easily manage their commitments while engaging in education, this increased flexibility can also cause additional issues through distractions and an inability to fully participate in any live, scheduled contact hours per week. Three sub themes relating to personal factor emerged in the study. These are time management, communication/interaction and motivation

Time Management. One of the central point of achievement in customary academic structure where marks are unequivocally affected by time organizing abilities is time management. Definitely, the capacity to manage time effectively is emphatically identified with scholarly achievement, and alternately, a poor timing lead towards failure and achievement level is decreased.

Becoming oriented to finish the academic demands of their courses, the students responded that:

[&]quot;I am able to manage my study time effectively and easily complete assignments on time"

[&]quot;I put on my goal list to finish my course. And by sticking through that. I am able to do what I ought to do for each of my subjects."

"The opportunity to work while learning using the current approach of CSU has helped me manage my time and resources wisely."

The respondents answered that time management is an influential factor that may positively or negatively affect efficacy in the flexible learning.

"I provide myself with a timetable for the tasks I need to finish for the day. I write them on my notepads and cross it out when I finish. If I get tired of learning, I give myself a break and finds time to finish other tasks; and when I feel to continue finishing the tasks, I go back studying."

Conversely, other participants also honestly revealed that sometimes his poor time management results to piled up unfinished tasks.

"With open time for learning, sometimes, my usual motto is that, "If tomorrow is not the due date, tonight is not the do date". In effect, I cram, submit not so good outputs and it makes me think and regret of the past days when I never did anything."

Time management abilities are most crucial in internet learning than formal structure which requires self-control so as to commit satisfactory time to course work. Though web learning gives flexibility to students to participate in and complete academic activities in such a time which suit them. But it demands a bank of inspiration, motivation, regularity, positive mind, and skills through which one can manage time easily (McCain, 2001; Schunk & Ertmer, 2000).

Communication and interaction

The participants also took an affective stance towards the flexible learning course due to their need for communication. They compared face-to-face classes with their virtual learning context and were critical towards the latter for not fulfilling their need for socialization with their friends.

"Learning is not enjoyable as it used to be. I feel like I am busy all the time with my lectures and I lost interaction with my classmates and friends."

"It makes me bored to do the tasks in the different courses all by myself."

Asking questions to my teachers in Group chats and private groups make me nervous. I noticed a serious communication gap between students and instructor. At time I needed more clarification for some lecture content but those points were left unexplained by the instructors.

In many cases, I feel anxious on my online submissions especially that I do not receive acknowledgement and that feedbacks take time.

Motivation

Students' motivation influenced both advantages and downsides, which is interesting. During the coronavirus outbreak, motivation for online learning was claimed to have had mixed results in higher education. Some students were unmotivated to learn as a result of online learning, while others were extremely motivated.

The enthusiasm and ambition to understand and add new knowledge have driven them to study hard even via flexible learning.

My drive to finish my course and graduate on time keep me focused on doing my tasks at hand.

In my studies, I am self-disciplined and find it easy to set aside reading and homework time

In learning by using technology, motivation plays as self-regulated learning for learners, Alario-Hoyos et al. (2017). The main characteristics of motivations are specific, motivation, goals of success, confidence, self-efficacy, and confidence in power.

I am motivated to learn online. My goal in life is to learn everything there is to know. Even if we are currently experiencing a pandemic that prevents us from studying face to face as we are used to.. this cannot be an excuse for us to quit learning since learning can be done everywhere as long as we have the will to learn.

In some ways, online studying has improved my becoming technical savvy... It inspires me to learn how to utilize some apps [applications] I never thought I'd use in my life and initially I am not interested to learn about.

Schunk & DiBenedetto (2020), argued that the success of the students' learning was related to their motivation.

Technologically-related characteristics

Technical challenges faced by the participants are discussed under the second overarching theme. This includes all essential technical elements, such as internet connectivity and the use of online tools. In the overall narratives concerning flexible learning, the role of information technology particularly on internet connection has been repetitively mentioned by students as a factor influencing their efficacy (Breuer et al., 2014; Cicha et al., 2021). Technical skills such as ICT experience and skills, own technical possession were reflected in the following verbatims. Familiarity with the use of relevant online tools to support learning in the flexible learning setup is an influencing factor on students self-efficacy. Most of the respondents are considered beginners in the use of learning management systems, online communication tools, storage devices, creating and packaging video materials, and uploading and managing web contents.

It is an extra credit that one is immersed with variety of tools in flexible learning. There are applications I did not know about and working on them make me anxious as I am not aware of their features.

I don't possess sufficient computer keyboarding skills for doing online work.

Lack of connectivity was a big influential factor in online learning. The situation is even worse for those from remote areas. The findings highlight the digital divide and lack of equity in access to uninterrupted internet proving to be a hassle to many students affecting their self-efficacy. The Internet connection in our area gives me a headache. "The difficulty of accessing the Internet, I was at home during this distance learning process. This makes me experience delays in getting information because access to the Internet in the area is a bit difficult, the internet connection is bad. The usual prompt of unstable internet connection during zoom or google meet interactions make me feel bad."

The technical problems like troubled sound due to pressure on the internet software was very common during online sessions."

Students expressed their struggles during exams. Majority of the respondents answered that unstable internet connection is their major struggle.

Some of the answers were:

My participation was greatly affected by issues like delayed download the lectures and internet lagging! The technical problems like troubled sound due to pressure on the internet software was very common during online sessions."

"I pretty make sure that when I take exam I secure my internet connection. But oftentimes, due to unstable internet connection sometimes I can't finish my exams. But honestly, most of the times lens connection is not good, perhaps. For so many instances, when I am in the middle of my exam the lens will not function or can't be reached. That makes me frustrated and angry."

"Connectivity issues, sometimes the wifi malfunctions when I am taking quizzes and exams on the platform, this lead to me getting low scores than expected because the quiz gets automatically closed. Server Traffic issues, when it comes to big exams where thousands of students try to access the site, the platform crashes. This results to unfavorable circumstances."

"Internet connectivity when taking exams can be a hindrance in answering those items correctly. The instant pressure, time limit plus the server issues brought by the platform during examination will result to bleak outcomes."

"The very poor internet connection influences me negatively especially during due dates of task submissions, synchronous engagements and examinations"

Lower bandwidth of collaboration channels creates disadvantages for users because bandwidth or capacities of transmitting information in each communication medium determine the effectiveness of networked collaboration in learning and problem solving. Alongside this, students also manifested influencing factor on this as evident in the statement below. My participation was greatly affected by issues like delayed download of the lectures and internet lagging! Constraints on data limit and data speed. The usual downloading and uploading speed of my internet as per speed test is very low. Internet is not the only factor to consider but also the equipment that is needed for the learners to engage effectively.

I have limited gadgets. In the interviews, it was found out that majority of the respondents' only use smartphones in accessing their online courses. Some of them have laptop shared with other siblings and friends.

The resources I have is also one of the problems I have because I don't have laptop and my phone is in the verge of giving up and I don't have enough money to buy new ones but I really find ways to make my activities."

In designing for online or distance learning, there is a need to understand the role of technology to attain the success of the engagement (Kerka, 1999). The readiness of the organization also yields to attaining success of the management (Javier, 2020). With the current health crisis with the shifting of learning delivery, the challenge would be on how to provide an inclusive IT infrastructure to provide quality education for all learners (Internet access and education: Key considerations for policy makers, 2017).

Teacher factor

With the advent of the COVID pandemic, digital tools' impact has been exponential in all educational levels. The role of the educator is critical in this new model, confirming the necessity to have technical resources and qualified educators to improve students' competence in order for them to work successfully (Joaquin et al., 2020; Li & Wong, 2018). My drive to motivation is affected by my teacher. When I know my teacher is technically skilled in variety of online tools and methods, I am becoming more eager to learn. As paticipants all belong to Gen Z, i.e., the generation of social media, and therefore their communication patterns are very much influenced by that. They appreciate a quick reaction from the tutor when they need to know something and cannot accept a long waiting time. One teacher related factor influencing them in their flexible learning is evident in the verbatim lifted below. Sometimes, I procrastinate when I do not hear feedbacks and updates from my teachers. By definition, teacher factor involves attitude of the teacher, his or her real-time response (feedbacking), teaching style, influences students through online learning platforms

Home environment factor

While learning became convenient in the comfort of their homes, respondents also felt this as one of their challenges. Some respondents said that their environment sometimes affect their learning experiences such as noise and no conducive space for learning. These are some of the respondent's answer:

"We know that after corona virus hits education, we stay at home and students need to study in their respective houses. It is very challenging to me, as a students because we don't have space in our house that surely I can focus working my lessons." "Aside from Low of internet connection, disturbance is one of the challenges that I've been encountered especially some of my teachers prefer a video activity and due to noisy environment I cannot focus and perform very well."

Ratliff (2009), pointed out that learning environments play a crucial role in student success. Students who study in a positive learning environment are more motivated, engaged and have a higher overall learning ability. On the other hand, students learning in poor environments – those that are uncomfortable, loud or full of distractions – will find it far more difficult to absorb information and stay engaged.

Moreover, the environment I have also adds up to the challenge in this online learning because sometimes my attention is diverted into some stuff in our home Most of the times, I cannot find a suitable place at home for taking my online classes and I feel like the environment is not suitable at home for attending online lectures."

"My family did not realize that I am seriously busy in learning through online system and I am just pretending to save myself of household chores that put a lot of pressure on me.

Conclusion and Recommendations

Self-regulated learning and digital or technological self-efficacy are the two themes found as a learning opportunity with the current learning modality. Personal, Technological, Communication, Home Environment and Teacher-related are the overarching themes that emerged as influencing factors in flexible learning. With the contours of education system changing with online education becoming the primary means of instruction, to be technically pedagogically ready, CSU must assess the compatibility of ICTs with current learning philosophy, examine various opportunities for incorporating flexible education, assess technology proficiency requirements for teachers and learners, ensure that ICTs will meet learners' educational needs, and ensure that instructors are competent to facilitate flexible learning (Muilenburg & Berge, 2005; Danchikov et al., 2021).

With this, training programs for technological and social interaction with teachers and collaborative interaction with peer student, strengthening motivation for learner is imperative to achieve a better quality of flexible –learning. In like manner, training programs for teachers focusing on improving teaching and professional behavior, course instructional planning & methodology, and online connectivity and availability may be addressed by the administration and concerned offices. This study was delimited to a qualitative study, which prevented many potential participants from participating due to the substantive time commitment involved in the research. Thus, it is suggested that subsequent studies focus on collecting larger samples from various colleges so that the results can be more generalizable. Similarly, the study could be validated through conduct of the same via quantitative method.

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