The Preparedness of the Data Center College of the Philippines to the Flexible Learning Amidst Covid-19 Pandemic

[1] MIKE D. BUMANGLAG
Data Center College of the Philippines- Laoag

[2] MARVIN M. TABARA
Data Center College of the Philippines-Laoag

[3] GERALD KEITH C. CABACUNGAN
Data Center College of the Philippines-Laoag

[4] JERMIN PAUL Q. TABUYO
Data Center College of the Philippines-Laoag

[5] RALPHY L. PAGADUAN
Data Center College of the Philippines-Laoag

[6] CASSANDRA B. PARAGGUA
Data Center College of the Philippines-Laoag

[7] MATHEW P. LANGBIS
Data Center College of the Philippines-Laoag

[8] JAY-LYNNE MAY S. ESCALONA
Data Center College of the Philippines-Laoag

[9] MADELYN P. ESTRADA
Data Center College of the Philippines-Laoag

Abstract— This study determined the preparedness of Criminology Instructors of Data Center College of the Philippines of Laoag City Inc. tin the adaptation of flexible learning amidst COVID-19.

The study applied quantitative and qualitative method utilizing an online and printed survey questionnaire. A total of 20 Criminology instructors were taken as respondents.

Weighted mean was used to analyse the respondents' level of preparedness, the methods used and the problems encountered in the adaptation of flexible learning. Frequency was used to analyse the coping mechanisms of the instructor in adapting flexible learning.

The salient findings of the study were the following. Tthe level of preparedness of the Criminology instructors is "very high" as indicated in the composite mean of 3.28, in addition there is a "high" support from the institution for them to be prepared as shown in the composite mean of 2.87.

The most effective method used by the Criminology instructors in the flexible learning is through online chat groups with the highest weighted mean of 3.80. Other methods used by the instructors includes: online lecture notes (3.70); social networking systems (3.45); recorded lecture audio (3.45); recorded lecture videos (3.45); and online discussion groups (3.25).

The used of phones, laptops, tables or any devices for distance learning education is the most pressing problems encountered by the instructors as shown in the weighted mean score of 3.30. Other pressing problems "always" encountered by the criminology instructors include: having sudden shift from face to face to online classes (3.35); checking and evaluating students' output from e-mail or other platforms (3.35) and; having unstable internet access intended for distance learning education (3.30). In addition, results of the interview showed that instructors also encountered problems on the submission of outputs on time, absences of students in the video conferencing and the grading system.

The best coping mechanism adopted by the instructor is active coping, that is, doing something about the situation and taking action to negate the problem. The other coping mechanism adopted by the instructor is the acceptance, meaning learning to live with the problem or situation.

Based on the findings, it is therefore recommended that: the DCCP management needs to provide better instructional support to the instructor, consider the implementation of the action plan, provide stress management programs for all employees of the institution, establish policies and guidelines in the flexible learning and communicate it all the faculty members of the institution, establish a grievance committee not only for the instructors but also for the students to overcome the different challenges of flexible learning. In addition, it is also recommended that the instructors must review

their methods in flexible learning and apply the best method that may benefit both them and the students, consider stress management program to protect their physical, mental and emotional health, join different webinars, workshops trainings for flexible learning; all stakeholders most especially the instructors and teachers may work together to provide a good quality of education despite any change in the educational system. Lastly a study must be conducted for a longer period of time and more respondents to determine and to yield better and accurate results.

I. THE PROBLEM AND ITS SETTING

Background of the Study
Lives were dramatically altered or even taken away due to the unexpected coming of a virus, the coronavirus disease or COVID-19, which later on became a global pandemic. From the third world countries to the most progressive ones, this virus has made a great impact in all quarters of life. It changed how people work, learn and interact as social distancing have led to a more virtual existence People were compelled to get out from their comfort zone and try to adapt changes to continue living. One of the most affected are the front-liners in the field of education- teachers, administrators and all the different agencies of education.

COVID 19 wreaked havoc on education; forcing teachers to rethink how they use technology for online learning became a potential toll to aid instructions among learners in all ladders of education supplemented by self-instructional modules.

Educators resorted to online platforms to reach out to students, webinars became a temporary classroom, parents were called for monitoring at home, and students got deprived of social interaction among peers. The World Health Organization (WHO) advised educators and students to conduct alternative learning due to the COVID-19 outbreak to mitigate school cancellation of classes. The program aims to elevate the loss of learning and provide remote learning opportunities while schools are closed. (World Bank, 2020).

In the Philippines during the onset of the pandemic, Chairman Prospero de Vera of Commission on Higher Education (CHED) insisted that learning must still continue. And there is an urgent need to explore other innovative learning modalities, thus the adaptation of flexible learning through CHED Memorandum Order (CM0) no.4 series of 2020 or the Guidelines in the Implementation of Flexible Learning. The said CMO compelled public and private Higher Education Institutions (HEIs) to implement and adapts flexible learning. Flexible learning according to CMO No.4 series of 2020 is a "pedagogical approach allowing flexibility of time. place and audience including, but not solely focused on the use of technology. Online or blended learning, macro and micro learning and self-instructional modules are some of the approaches of flexible learning. And Data Center College

of the Philippines of Laoag City Inc., as one of the private HEIs in the Philippines adapted flexible learning particularly online learning and modular learning approaches. The implementation of flexible learning as a delivery mode was adopted beginning AY 2020-2021 can be extended upon consultation with the stakeholders concerned and upon review of the Commission.

Despite the postponement of classes in public schools, there were some private schools who decided to push through the opening on August 24, 2020. With the start of classes, instructors from the private's sectors were able to experience difficulties with their respective subjects. Poor internet connections that disrupt the flow of the discussion, physical noise coming from vehicles, people and other things that would affects the students' concentration, teacher's inability to fully discuss their lesson due to limited synchronous time and what not. These are just some of the bitter realities that the teachers need to face as they fulfill their responsibility of educating young people.

With these problems being observed nationwide, the researchers found out that the faculty members of the Data Center College of the Philippines of Laoag City Incorporated specifically at the College of Criminal Justice Education (CCJE), have their own fair share of experiences and difficulties with the educational set-up today. Thus, this study was conceptualized to assess the preparedness of the criminology instructors at DCCP-Laoag when it comes to flexible learning.

As this pandemic is slated to exist until the preventive vaccine is discovered, it is essential to know how the educators who are the prime facilitators of the education adjusted to this transition and what challenges they faced while adapting to this transition as their preparedness for the coming times.

Statement of the Problem
This research study was conducted to assess the preparedness of DCCP-CJJE instructor to flexible learning. Specifically, it aimed to answer the following questions:
1. What is the level of preparedness of criminology instructors of the CCJE in flexible learning?
2. What are the methods used in flexible learning?
3. What are the problems encountered by instructors in flexible learning?
4. What are the coping mechanisms of criminology instructors adapting flexible learning?

Theoretical Framework
The following theories were used in this study.

Transformative Learning
Transformative learning occurs when adults experience a disorienting dilemma, such as the move from live, face-to-face classroom teaching to online teaching. Reflective discourse can enable the instructors or faculty members go through the process of integrating new information and creating new meaning perspectives, (Mezirow, 1991).

Their knowledge of teaching and their perceptions of their role as teachers from a traditional cultural perspective will be examined to identify whether their self-concept had been altered in the transition to online facilitator of learning. Through this, their preparedness will be assessed.

Attitudes. Understanding instructors' attitudes will be useful for the school administrators to have strategic plans to support and motivate them to participate in the adoption of e-learning or blended learning with willingness.

Pedagogy and Methodology. "Readiness in terms of instructional strategies or pedagogy has to do with the knowledge, skills, attitudes, and habits of instructors to use the appropriate strategies acquired through normal face-to-face classroom interaction to accommodate the e-learning "classroom" and learners" (Eslaminejad et al., 2010). The term "pedagogical knowledge" refers to the ability to design appropriate learning experiences and good at selecting instructional media and delivery methods, management of small/large group discussion, and internet interaction (Gagne et al., 2005, as cited in Eslaminejad et al., 2010).

Those learning activities must be designed for the web and available through the Internet. These could not be achieved unless the teachers forming good habits with discipline. Issues of methodology were identified as a major challenge affecting the success or otherwise of e-learning. Most researchers emphasized that design, delivery and pedagogy challenges are crucial and traditional approaches cannot be assumed to transfer to the e-learning environment. The teacher's role has to shift from the lecturers to instructors or facilitators of the online classes and have to maximize the role of the learners. Learners need to be the center of the learning process and can express themselves in online learning.

The process of transferring these educational goals from face-to-face to online environment requires the lecturers of the school to be well prepared for the paradigm shift. Beyond the knowledge and skills vital for online teaching, online instructors should teach with care, love and passion.

Technology Competence. Many teachers who do not consider themselves to be well skilled in using Information and Communication Technology (ICT) feel that technologies are not helpful in their teaching and personal work. Young scholars, having grown up with ICT, had an advantage but it could take time for the older generations to get used to the new ICT and LMS. There were many drawbacks that needed to be taken into account. Firstly, there was still insufficient understanding about eLearning and ICT among three important players: manager, lecturers, and students.

Moreover, providing pedagogical training for teachers, rather than simply training them to use ICT tools, is an important issue. Nevertheless, the instructors lacks pedagogical training for instructors. This leads after instructors have attended professional development courses in ICT they still do not know how to use ICT in their class. When there are new tools and approaches to teaching,

instructor training is essential in both ICT and pedagogical skills if they are to integrate these into their teaching.

Time Constraint. Koo (2008) supposed that time constraint could be a major impediment to affect the teachers' perceived readiness for online collaborative learning. Some teachers expressed that they were too busy with their classroom and school administrative works (Lim & Hwa, 2007; Koh, 2004, as cited in Koo, 2008).

The relationship of the transformative theory to the study is that it can explain the factors that affect the readiness or preparedness of instructors in online learning. The attitude of teachers will affect their preparedness as they migrate from traditional face-to-face to flexible learning classes. Pedagogical skills and technological strategies is essential in teaching flexible learning. Attending webinars and seminars can help instructor be technically – equipped.

Conceptual Framework

The research paradigm presented in Figure 1 reflects the framework of this study. As shown in the schematic illustration, the study adopted the Input, Process and Output Model.

The inputs of this study are: the level of preparedness in flexible learning, the methods used, the problems encountered and the coping mechanisms of the Criminology instructors of Data Center College of the Philippines of Laoag Cty, Inc. The process focused on the descriptive analysis and evaluation of the survey data. The analysis was followed by the formulation of the Action Plan to Enhance the Preparedness of Criminology Instructors on Flexible Learning, which was the output of the study.
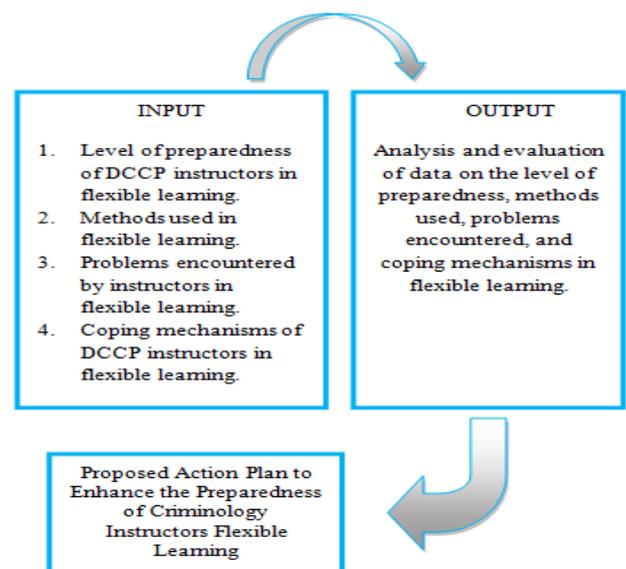

Figure 1. Research Paradigm

Significance of the Study

The following will be benefited from this study:

Faculty members. The people are affected by constant changes and improvements in the field of educational system.

Therefore, it is vital to understand faculty experiences as they go through the transitional process since they are the ones transitioning. They are the main individuals who will benefit from this study for they will be able to asses not just themselves but also the other factors that are involved in this educational set-up. Through assessment, they would be able to know what aspect needs improvement whether it is for personal growth or professional growth.

School Administrators. The findings will prompt institutions to better prepare faculty members and to create a model for faculty member development that can be implemented and further researched upon. Better preparation and institutional support will result in improvements in the quality of online education and greater satisfaction among faculty members as well as students. Also, having a better understanding of faculty experiences will help provide data for instructional designers and instructional developers, to properly support faculty as the transition happens.

Students. The students will also be benefited from this study because if their instructors and school are well-prepared in teaching despite the sudden shift in the educational system, they will still be able to get a worthwhile and good quality education amidst any circumstances

Future Researchers. This study would bring awareness about challenges as well as the positive things that come along with the coming of a pandemic especially in the field of education. It would also encourage them to make further studies about the research topic for them to yield more accurate and reliable results.

The Researchers. This study conducted by the researchers could help them formulate their own ideas and new ways in adjusting to the new normal for both the instructors and students.

Scope and Limitations of the Study

The scope of this study was concerned in assessing the preparedness of the Criminology instructors of the Data Center College of the Philippines of Laoag City Inc. The study looked into their level of preparedness, methods used, problems encountered and their coping mechanisms in the adaptation of flexible learning.   The results of the survey were the bases for the crafting of the Action Plan to Enhance the Preparedness of the Criminology Instructors of Flexible Learning.

The respondents of the study were the Criminology instructors of the Data Center College of the Philippines of Laoag City Inc. who were employed during the Second Semester of School Year 2020-2021.

The study was conducted from August 2020 to January 2021.

Definition of Terms

The following were the terms used in this study.

COVID-19. It is an infectious disease caused by a new strain of coronavirus that brought about the world pandemic that was discovered on December 2019 in Wuhan, China.

COVID-19 Pandemic. It is the global epidemic of an infectious disease which is the coronavirus disease 2019 caused by severe acute respiratory syndrome coronavirus 2.

Flexible Learning. This refers to the method of learning adapted by the institution for the new normal of education, particularly the online and modular learning.

Modular learning. This pertains to the mode of flexible learning that uses Self-Learning Modules in print or digital formats.

Online Learning. This refers to the mode of flexible learning where discussions take place over the internet.

Instructors. These are the part-time and regular teachers/instructors/professors of the College of Criminal Justice Education of the Data Center College of the Philippines of Laoag City Inc teaching professional and general education courses,

Preparedness. This refers to the state of readiness of the Criminology instructors in the adaptation of flexible learning. This includes personal readiness of instructor and school's support to the instructors for them to be ready.

II.   REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents all the review of related studies and literature needed to attain the objectives of the study.

Flexible Learning

''Flexible Education'' is confidently embedded within higher education discourse, yet it is an opposed one filled with a diversity of meanings. CHED Memorandum Order No. 4 Series of 2020 defined flexible learning as a plan and transport of programs, courses and learning interventions that speak learners' exceptional needs in terms of place, pace, process and products of learning. The use of digital and non-digital technology is involved, and covers both face-to-face and outside-the-classroom learning mode of delivery. The continuousness of inclusive and accessible education is guaranteed when the use of traditional modes of schooling is not achievable, as in the manifestation of national emergencies.

According to the same CHED Memorandum Order, the Commission on Higher Education proposed different approaches to be adapted by HEI that depends on the students' resources and other factors. Approaches comprise online learning and blended learning, macro and micro learning approach (a mix of online and offline activities) and self-instructional modules mostly offline activities. Accordingly, HEIs will decide on the most feasible method of flexible education (both in learning and teaching) to which they will use according on their ability, prevailing condition,

guidelines on the national government agency and of the local government unit.

Blended Learning

Blended Learning is defined in many terms. First, it is defined as the combination of web-based technology like collaborative learning, online education, video streaming, self-paced learning, audio and text in achieving educational aim. Second, it is the mixture of several pedagogical approaches like behaviorism, constructivism and cognitivist to create a learning that has ideal and finest outcome with or without instructional technology. Third, it is the combination of any form of instructional knowledge and technology like the use of videotape, CD and online trainings and lectures. Lastly, Blended Learning is the mixture of instructional technology with tangible job responsibilities in order to build a harmonious education (Dr. Margaret Driscoll, 2002).

In conclusion, Blended Learning is a mixture of technology, pedagogies, job tasks, oldest mechanical media and theories of learning (Cronje, 2006).

Online Education

Learning and teaching via internet is now the new trend or the so-called new normal kind of education nowadays since internet and the use of gadgets like computer, cellphone and laptop are accessible to students. This is the best instrument in order to have communication to teachers even not in face-to-face arrangement.

Online education is a form of education where students use their home computers through the internet. It is a Computer-based training, Web-based training, Internet based training, online training, e-learning (electronic learning), m-learning (mobile learning), computer-aided distance education - online education goes by many names and comes in a variety of styles, but at its core:

"Online education is electronically supported learning that relies on the Internet for teacher/student interaction and the distribution of class materials" (India Education, 2021).

Quality of Online Education

Sloan-C identifies "five pillars" that are necessary for a quality online program (Lorenzo & Moore, 2002).

Here are "five pillars'' that are necessary for a quality online program identified by Sloan-C (Lorenzo and Moore, 2002).

First, learning effectiveness. This comprises factors like active learning and higher order thinking. Without the result of learning efficiency, distance education could not be alike to face-to-face education.

Second, the satisfaction of students, endorse that there must be an investigation to institutions whether students feel that their learning process needs to be done online or enroll in another class. Student's satisfaction is enhanced through support services and a higher level of interaction.

Third, faculty satisfaction. Although some members of the faculty have reported a bigger fulfilment with elasticity and student interactions, they need assurance and acknowledgement that their efforts are appreciated.

Fourth, the assurance that distances education is worth the money and is cost effective/

Fifth, access. Regardless of locations and variations in the availability of technology, students are in need of having access to online programs. Universities are required to ensure that their technical infrastructures are available and consistent by students who are potential. Online learning is not embraced by every community college teacher, and not all the styles of teaching adapt well to the online environment (Johnson & Berge, 2012)

Role of Faculty in Online Education

The role of higher education faculty (which comprises community college faculty) in an online situation of learning is different from the role of traditional education. Online instructor is anticipated to stand as a facilitator of online learning (Frese, 2006; Jaffee,2003;Steiner,2001).

Subsequently, members of the online faculty must adjust to a new way of teaching and relate in altered ways to their peers, learners and other professionals with whom they previously had contact. Often, all of this must be done with insignificant drill, planning and preparation. The active learning strategies needed in an online set up alter how teachers teach and how the students learn (Jaffee,2003). Online faculty members' role entails competent handling of discussions and learning activities in order to engage online learners and assure that they have sufficient interaction with the content (Frese,2006). McCrory et al.., (2008) mentioned that faculty members are in need of instructional design competencies in altering face-to-face courses into an online set up in order for students to obtain guidance in their learning. Other instructional skills essential for effective online teaching include designing authentic assessments and dealing with plagiarism. Despite of well-developed content, the application of instructional design, and other factors, interactions of students were the factor needed at how the class went.

Faculty members observed there was an increase in the amount of time when teaching online (Hopewell, 2007). Faculty members stated that responding questions thru email is more time-consuming than orally answering a question in the presence of other students who may request the same information. Responding to students' emails and discussions once or twice a day provides consistency and reliability for the students and enables faculty members to be able to structure their time so they are not feeling the need to respond continuously to student emails (Boyle & Wambach, 2001). Also, keeping courses and designing multimedia components increases the time to develop online courses.

Faculty Preparation

Some of the problems facing institutions of higher education that are interested in offering online education is

addressing faculty preparation to teach online. Yang and Cornelious (2005) state that instructors are worried about regulating to the change in their role from professor centered lecturer to student-centered facilitator. By quality of being content experts in their field and knowing the institution's online learning management system (LMS), faculty are not essentially equipped to deliver quality distance education. Bates and Watson (2008) state that numerous faculty, without formal training and basically on their own, have simply adapted their face-to-face teaching methods to provide accommodations online education demands. Likewise, Oomen-Early and Murphy (2009) state that institutions have pushed faculty into the role of online educators rather than transitioned them via preparatory training. And finally, Palloff and Pratt (1999) feel it is noteworthy that faculty are trained in the process of online learning if they are to move into the arena of online education.

Administrative Support

Administrative are people involved in carrying out duties and responsibilities or in tasks required to carry out duties and responsibilities. They ensure that the organization runs smoothly and they also manage facilities and staff.

The role of administrative support are welcoming visitors to the school and dealing with their enquiries, answering the phone, administration relating to pupil attendance, managing email/post, using IT systems to draft letters, emails, reports, newsletters, monitoring school supplies, keeping financial records, keeping paper and electronic records up to date, using reprographic equipment, ordering resources, paying invoices and banking cash, sending key educational data about the school to the Department of Education or equivalent by following the health protocol to ensure the safety of everyone.

Faculty Readiness to Teach Online

Some institutions use a readiness device to assess faculty readiness to teach online, but most of these are not methodically studied or empirically tested. Few researchers have studied faculty readiness for online teaching. Lichoro (2015) found that faculty members do not feel sufficiently prepared to teach online. However, there is still a necessity to identify competencies to prepare faculty to teach online, and by doing so we will be providing guidance to prepare faculty to teach online.

Faculty readiness to teach focus on two aspects of readiness: (1) faculty attitude on the importance of online teaching and (2) faculty perceptions of their ability to confidently teach online. Attitude refers to the viewpoint a person has about something and its personal relevance to them (Krosnick & Petty, 1995). Capability has reference to the capacity to successfully perform (Ferguson, 1954).

The preparation for the readiness of faculty members shows such an important role in the manner of shifting from conventional to cyber learning setting as they are the major motivating force connecting the administrators and the students to help carry out the school duty. The faculty readiness with attitude, training, and behavior is called as one of the most impelling factors on student online learning experience (Adair, edited by Shattuck, 2014).

Online Teaching: Benefits and Challenges

The development of online education has both advantages and disadvantages for all participants. For school leaders and administrators, it has offered a more cost-saving delivery set-up in terms of less investment in building classrooms, power, and travel. It provides the flexibility for faculty and learners, reduces travel cost and advancement of technology. In the new time of online teaching, faculty members and students slowly switch from traditional classrooms to cyber-learning environment. Teachers face difficulties under the current normal education system. These problems include teaching the learners where it is difficult for teachers to reach out to all the learners at home, even the teachers are using different forms of communication. It is therefore quite difficult for them to develop the skills of the learners because the learners remain at home while learning the lessons. Not all parents have the desire and ability to support their children in their studies. Some parents lack the ability to comprehend the handwritten details written on the modules. Teachers cannot teach the lesson the way they used to teach. The majority of parents prefer written modules as an effective way of learning. Teachers' function is typically limited to planning modules, distributing and retrieving modules, answering parents' questions, and correcting learners' responses. Based on these, it is obvious that there is no contact with the learners. In the absence of a teacher, the learners study their lessons all by themselves. Enhancing the skills of the learners is considered a challenge for the teachers because they do not have the confidence that the skills of the learners continue to improve at home. It also needs the guidance of teachers to develop the skills of the learners.

Modular Learning

Modular learning is a form of distance learning that uses Self-Learning Modules (SLM) based on the most essential learning competencies (MELCS). The modules include sections on motivation and assessment that serve as a complete guide of both teachers' and students' desired competencies.

Modular learning is the most popular type of Distance Learning. In the Philippines, this learning modality is currently used by all public schools because according to a survey conducted by the Department of Education (DepEd), learning through printed and digital modules emerged as the most preferred distance learning method of parents with children who are enrolled this academic year (Bernardo, J). This is also in consideration of the learners in rural areas where internet is not accessible for online learning. The teacher takes the responsibility of monitoring the progress of the learners. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging among others. Where possible, the teacher shall do home visits to learners needing remediation or assistance (Llego, n.d.). Printed Modules will be delivered to students, parents or guardians by the teachers or through the Local Government Officials.

The literature and studies reviewed were important inputs to the researchers in the conceptualization of the study in terms of the variables studied, the research design followed, the questionnaire used and in the analysis of the data.

III. METHODOLOG*Y*

This portion presents the discussion of the research method, population and locale of the study, the instruments, the data gathering procedure and the treatment of data.

Research Method
This study applied the mixed research method through a descriptive research. Mixed research method refers to a methodology of research that advances the systematic integration of quantitative and qualitative data within a single investigation or sustained program of inquiry. Descriptive design allows gathering of data which determined and described a current state and perceptions of respondents (Sage Publications, Inc 2016).

Population and Locale of the Study
The participants of the study were 20 Criminology instructors. The respondent of the study were the instructors of the College of Criminal Justice Education of the Data Center College of the Philippines of Laoag City Inc. teaching professional and general education courses, regardless of their employment status. Total enumeration was applied.

The study was conducted in Data Center College of the Philippines Inc. located at Barangay. 1, San Lorenzo, Laoag City, Ilocos Norte.

Data Gathering Instruments
The data needed were gathered through a survey questionnaire; printed survey questionnaire and electronic questionnaire via google forms.

The questionnaire was composed of four parts. The first part determined the respondents' level of preparedness. The second part was concerned with the methods that the teachers used for flexible learning. The third part tackled about the problems that they encounter with the use of flexible learning. The last part showed the coping mechanisms of the respondents in adopting flexible learning.

Further, an informal interview was conducted to supplement the answers of the respondents.

Data Gathering Procedure
Questionnaires was developed by the researcher, was submitted to the adviser for checking and approval. After it was approved, researcher finalized the questionnaire and encoded them in the google forms. Before the administration of the questionnaires to the respondents a letter requesting permission to conduct the study was secured. After approval of such, the researchers distributed copies of the questionnaire to the respondents while also conducting informal interview. Afterwards, the collected data was tallied, tabulated and interpreted.

Treatment of Data
The data collected was subjected to certain statistical treatments using frequency, percentage and weighted mean.

Weighted mean was used to analyze and interpret the data on the level of preparedness, methods used, and problems encountered by the respondents on the adaptation of flexible learning.

Ranking Scale was used to analyze and interpret the data on the coping mechanism of the respondents.

The responses of the instructors on their level of preparedness on the adaptation of flexible were coded and interpreted as follows:

Value	Range	Descriptive Interpretation	Verbal Interpretation
4	3.26 – 4.00	Strongly Agree	Very High
3	2.51 – 3.25	Agree	High
2	1.76 – 2.50	Disagree	Low
1	1.00 – 1.75	Strongly Disagree	Very Low

The responses of instructors on the problems encountered on flexible learning were coded and interpreted as follows:

Value	Range	Descriptive Interpretation	Verbal Interpretation
4	3.26 – 4.00	Always	Problem encountered daily in flexible learning
3	2.51 – 3.25	Often	Problem encountered in flexible learning twice or thrice a week.
2	1.76 – 2.50	Rarely	Problem encountered in flexible learning once a week.
1	1.00 – 1.75	Never	Never encountered problem in flexible learning

The responses of the instructors on the methods used by them in flexible learning were coded and interpreted as follows:

Value	Range	Descriptive Interpretation	Verbal Interpretation
4	3.26 – 4.00	Always	Everyday use of method for flexible learning
3	2.51 – 3.25	Sometime	3-5 days a week use of method for flexible learning
2	1.76 – 2.50	Rarely	1-2 days a week use of method for flexible learning
1	1.00 – 1.75	Never	None usage of method

IV.   PRESENTATION. INTERPRETATION, AND ANALYSIS OF DATA

This chapter discusses about the data gathered from the respondents and the researchers' interpretation of the findings.

Level of Preparedness of Criminology Instructors in the Adaptation of Flexible Learning

The abrupt change in the education environment forces instructors to adapt innovative means to continue imparting knowledge to the students. The level of preparedness of Criminology Instructors was divided into two: personal readiness as instructor and school's support for them to be ready. The level of readiness of the Criminology Instructors in flexible learning is presented in table 1.

As indicated in the composite mean of 3.28, Criminology instructors, personally are *very highly* prepared in the flexible learning, on the other hand there is a *"high"* support from the institution for them to be prepared as shown in the composite mean of 2.87.

In the personal readiness of Criminology instructors, the item *prepared modules on my assigned subject,* has the highest mean of 3.70. In the flexible learning, modules became one of the most needed resources. The study implied that the Criminology instructors always make sure that they

have prepared their learning materials before the start of classes. Dochy (1989) explained that modular learning's most important consideration is the student. The author explained that learners want a more individualized approach to the course content so that his or her prior knowledge and personal characteristics are taken into account. Further, modularization will generally allow a student to learn at his or her own pace. Preparing modules beforehand would let all learners will still be able to re-learn or review their lessons in spite of not being able to attend their online classes due to unstable internet connectivity.

Moreover, both attending webinars and participating in training workshops in relation to flexible learning had the second highest weighted mean of 3.35. This means that the respondents persevered to equip themselves with necessary information as they shift from traditional face-to-face discussion to online classes. According to Jaffee (2003), in a flexible learning, faculty members must adapt to a new way of teaching and relate in different ways to their peers, students, and other professionals with whom they previously had little contact. Frequently, all of this must be done without significant preparation or training.

It is also good to note that instructors had *learned to utilized learning modalities applicable for flexible learning* (3.30) and had updated the content of their lecture (3.25).

Table 1. Level of Preparedness of Criminology Instructors in Flexible Learning. (n = 20)

Activities Before the class starts, I have…	Weighted Mean	Descriptive Interpretation
1. Updated or edited the content of my lecture topics from prelim to final period	13.25	Agree
2. Prepared modules on my assigned subject course	3.7	Strongly Agree
3. Attended webinars in relation to flexible learning	3.35	Strongly Agree
4. Participated in training workshops in relation to flexible learning	3.35	Strongly Agree
5. Attended school meeting for the conduct of flexible learning	3.25	Agree
6. Collected information about how to conduct flexible learning	3.10	Agree
7. Learned how to utilized learning modalities applicable for flexible learning	3.30	Strongly Agree
8. Prepared recorded lecture videos and other media needed for instruction	3.20	Agree
9. Prepared myself to shift to flexible learning	3.05	Agree
Composite mean	**3.28**	**Strongly Agree**
Before the class starts, the school has…		
1. Encouraged me to attend webinars in relation to flexible learning	3.25	Agree
2. Instructed me to attend trainings and workshops regarding flexible learning	2.05	Disagree
3. Shown their support through constant communication and updates.	3.05	Agree
4. Conducted online meetings to ensure that their employees are being guided properly.	2.95	Agree
5. Provided sample learning materials that could serve as basis or inspiration for the online learning.	3.05	Agree
Composite Mean	**2.87**	**Agree**

Legends:

Scale of Mean Ratings	*Descriptive Interpretation*	*Verbal Interpretation*
3.26-4.00	*Strongly agree*	*Very High*
2.51-3.25	*Agree*	*High*
1.76-2.50	*Disagree*	*Low*
1:00-1.75	*Strongly Disagree*	*Very low*

Meanwhile, on the support from the school for the readiness of the instructors, it can be gleamed from the table that the *institution encouraged the instructors to attend webinars in relation to flexible learning* (3.25). This implies that the institution wants the teaching force to be well equipped in the adaptation of the flexible learning. Other supports receive from the institution include: *shown their support through constant communication and updates (3.05), provided sample learning materials (3.05) and conducted online meetings to ensure employees are guided properly (3.05).* This substantiate the idea that the school and the teachers are really working hand-in-hand to provide quality education to their learners in whatever mode of education they have.

However, *instructed me to attend training and workshops regarding flexible learning* has the lowest weighted mean of 2.05. This implies that the institution somewhat lacks support in this endeavor of the Criminology instructors.

Methods Used by Criminology Instructors in Flexible Learning

The implementation of flexible learning compelled the instructors to adapt methods of flexible learning that suits the need of the students. Table 2 discusses the different methods used by instructors in flexible learning.

It can be gleaned from the table that *online chat groups* is the most effective method in flexible learning, with the highest weighted mean of 3.80. This is not quite surprising for most students especially the "millenials" are more adept to technology nowadays. With the advent of technology and the birth of different social media platforms, it is but a good strategy to tap in to things that they students most familiar with. Online chat groups like Facebook and Messenger, which became the cyber classroom, could bridge the gap between learners and teachers. Teaching in cyberspace requires instructors to move beyond old models of pedagogy into new practices that are more facilitative (Palloff and Pratt, 2000). According to Palloff and Pratt (2000), in online distance education, attention needs to be paid to the development of a sense of community within the group of participants for the learning process to be successful. In order to achieve success in transition to cyberspace classroom, several key areas were suggested, which are: ensuring access to and familiarity with the technology in use; establishing guidelines and procedures, generated with significant input from participation and "buy-in" from participants; promoting collaborative learning; and creating a double or triple loop in the learning process to enable participants to reflect on their learning process.

Other methods used by the instructors includes: *online lecture notes* (3.70); *social networking systems* (3.45); recorded *lecture audio* (3.45); *recorded lecture videos* (3.45); *and online discussion groups* (3.25).

The result further implies that instructors had chosen methods that they know will help students understand the topic even with limited internet connection.

On the other hand, the use of *telephone or voicemail* got the lowest weighted mean of 2.55. Instructors sometimes used this method to follow-up activities, for graded recitation purposes or to confirm their answers in their assessments. One-on-one calling of students using this method is time consuming.

Other methods that are sometimes used by the instructors are: *Texting/Instant Message (3.15); Online videos like Youtube, TED etc. (2.95); Conduct online class (2.80); Online collaboration tools like Wiki, Google Doc etc. (2.75); Email (2.75); Module (2.60); Online slide presentations with audio (2.60); and Online slide presentations with images and text only (2.50).* The results showed that methods that may not give detailed explanation to a certain topic and that requires a stable internet connection is sometimes used by the instructor.

Table 2. The Methods Used by Instructors in Flexible Learning. (n = 20)

Methods in Flexible Learning	Weighted Mean	Descriptive Interpretation
1. Conduct online class	2.80	Sometime
2. Recorded lecture videos	3.40	Always
3. Recorded lecture audio	3.45	Always
4. Module	2.60	Sometimes
5. Online lecture notes and assignments posted on	3.70	Always
6. Online slide presentations with audio	2.60	Sometimes
7. Online slide presentations with images and text only	2.50	Sometimes
8. Online discussion groups (Discussion boards	3.25	Always
9. Online chat groups	3.80	Always
10. Online collaboration tools (Wiki, Google Doc etc.)	2.75	Sometimes
11. Email	2.75	Sometimes
12. Telephone/Voicemail	2.55	Sometimes
13. Texting/Instant Message	3.15	Sometimes
14. Online videos (YouTube, TED etc.)	2.95	Sometimes
15. Social networking systems (Facebook etc	3.45	Always

Legends:

Scale of Mean Ratings	Descriptive Interpretation	Verbal Interpretation
3.26-4.00	*Always*	*Everyday use of method for flexible learning*
2.51-3.25	*Sometimes*	*3-5 days a week use of method for flexible learning*
1.76-2.50	*Rarely*	*1-2 days a week use of method for flexible learning*
1:00-1.75	*Never*	*None usage of method*

Problems Encountered by Criminology Instructors in Flexible Learning

Table 3 presents the obtained mean ratings in view of the problems encountered by Criminology instructors in the adaptation of flexible learning.

The results indicated that the Criminology instructors of DCCP Laoag City Inc. encountered various challenges in the flexible learning. The data showed that most of them experienced different level of difficulties along the indicators relative to the problems encountered in flexible learning.

The table revealed that *using phones, laptops, tables or any devices for distance learning education* is the most pressing problems encountered by the instructor as shown in the weighted mean score of 3.30. One of the bitter realities not just for students but also for teachers is the lack of access to equipment needed for online learning particularly laptops.

Sloan-C "five pillars" necessary for a quality online program includes access which is considered as the fifth pillar. Instructors as well as students need to be able to access the online programs regardless of location or variations in available technology. Access requires universities to ensure that their technical infrastructures are reliable and accessible by potential students. Aside from that, most educators especially seasoned teachers are not well-versed with the modern technology which can hinder their way of teaching (Lorenzo & Moore, 2002).

Other pressing problems *"always"* encountered by the criminology instructors include: *having sudden shift from face to face to online classes (3.35); checking and evaluating students' output from e-mail or other platforms (3.35) and; having unstable internet access intended for distance learning education (3.30).*

Table 3. Problems Encountered by Instructors in Flexible Learning. (n = 20)

Problems Encountered	Weighted Mean	Descriptive Interpretation
1. Establishing communication with my students	3.25	Often
2. Having unstable internet access intended for distance learning education	3.30	Always
3. Using of phones, laptops, and tablets or any devices for distance learning education	3.40	Always
4. Using social media, e-mails, and other platforms of distance learning education	2.95	Often
5. Giving instruction and responding to queries through e-mail and messages	2.90	Often
6. Encouraging participation and utilization of features in online classes	2.90	Often
7. Having time management in the conduct of classes, monitoring of responses, availability of students, and other online classes issues.	3.20	Often
8. Having sudden shift from face to face to online classes	3.35	Always
9. Managing the stress caused by community quarantine at home and in between online classes demands.	3.35	Always
10. Beating the deadlines and requirements set by the school administrators.	3.00	Often
11. Establishing a network of communication among stakeholders such as parents for support at home.	3.05	Often
12. Checking and evaluating students' output from e-mail or other platforms	3.35	Always
13. Building a positive environment through online classes through emotional support among my students aside from content-based teaching and learning.	3.10	Often

Legends:

Scale of Mean Ratings	Descriptive Interpretation	Verbal Interpretation
3.26-4.00	*Always*	*Problem encountered daily in flexible learning*
2.51-3.25	*Often*	*Problem encountered in flexible learning twice or thrice a week*
1.76-2.50	*Rarely*	*Problem encountered in flexible learning one a week*
1:00-1.75	*Never*	*Never encountered problem in flexible learning*

The problem with the lowest mean includes: giving instruction and responding to queries through e-mail and messages and encouraging participation and utilization of features in online classes with both have a mean score of 2.90. This item may have the lowest mean; however, instructors still consider them as problems though not as pressing as the other variables. Giving instruction and responding to quarries through email and messages it can is more time-consuming than verbally answering a question in the presence of other students who may request the same information. Instructors may feel compelled to respond to emails as soon as they were received and, consequently, this was seen as an interruption that occurred throughout the day. Monitoring discussion boards to ensure students were

interacting with the content, as well as providing additional assignments, factored into the increased time spent teaching online, though this opinion was not universally held by all faculty members within the study. In connection with these, according to Frese (2006), the role of online faculty members requires skillful manipulation of discussions and learning activities in order to engage online learners and ensure they are interacting sufficiently with the content. Faculty members then need instructional design competencies in converting face-to-face courses into an online venue so that students will receive guidance in their interactions (McCrory et al., 2008).

Other problems "often" encountered by the instructors include: *Establishing communication with my students (3.25); Building a positive environment through online classes through emotional support among my students aside from content-based teaching and learning (3.10); Having time management in the conduct of classes, monitoring of responses, availability of students, and other online classes issues (3.20); Establishing a network of communication among stakeholders such as parents for support at home (3.05); Beating the deadlines and requirements set by the school administrators (3.00); Using social media, e-mails, and other platforms of distance learning education (2.95).*

In addition, with the above problems, results of the interview showed that instructors also encountered problems on the submission of outputs on time, absences of students in the video conferencing and the grading system.

In the submission of outputs, instructor mentioned:

" Problemak dediay dida panagsubmitti outputs da. Dagijay daduma haan dapayagseen ta group chat".

(I have problems with those who do not submit outputs and some would not even bother to read messages in our group chats.)

Some students do not bother to submit requirements on due dates thus making it harder for instructors to finish their grades on time.

" Adda pay dagijay pilpiliten nga agipasa output tapnu la maikkan grades dan nu maminsan su da rason nu apay maladaw nak agipasa grades".

(There are also cases that it is us who insists on these students to submit their outputs just for them to have a grade, and this is sometimes one of the reason why I am late in the submission of grades.)

These delay of submission of outputs made it hard for the instructor to finish their grades on time.

In video conferencing, some students do not attend the class due to various reasons like poor internet connection or some are working students and because of this, it is not easy

for the instructor to gauge the level of understanding of every student.

According to them:
"Adda dagitay student nga di makasali ti online class gapu ta kaadwan na agwowork da tapos daduma pagrason da nga nga narigat signal da gapu ta bantay ayan da".

(There are some students that cannot join online class because some of them are working and have a poor signal in their area)

Lastly, most of the instructors agreed that it is tough to give grades to students because of this modality of learning.

"Mesa pay nga problema deta panagited ti grade kanyada, output ken exam laeng ti pagal alaak igrade kon".

(One more problem in giving grades to them is that their output and exam are my only basis.)

Coping Mechanisms of Criminology Instructors in adapting Flexible Learning

The Criminology instructors adopted different coping mechanisms depending on the problems they have encountered. Table 4 shows the result. As indicated in the table, active coping got the highest frequency as the best coping mechanisms adopted by the Criminology instructors in dealing with the challenges of flexible learning. *Active coping* got the highest frequency in all the problems encountered. This implies that Criminology instructors when facing challenges is doing something about the situation and tends to take action to negate the problem. This further implies that Criminology instructors often solve the problems immediately when they occur.

Acceptance means to face the reality even if it does not fit one's expectations or desires, and the willingness to deal with reality nevertheless. Acceptance can be an adaptation to unchangeable negatives events by helping to maintain the individual psychological well-being and capacity to act. A common piece of everyday advice is that it is best to simple accept a negative event in order to get over it and continue with life. There seems to be generally held belief that in order to cope with negative events, it is important to accept things as they are, and not to dwell on them too much (Nakamura and Orth ,2005).

In the case of the teachers, they also have a fair share of ups and downs during the sudden shift of the learning modes of the students. They work tirelessly to create a challenging, nurturing environment for their students. Eventually, they have no fear of learning new teaching strategies or incorporating new technologies into lessons, and always seems to be the one who is willing to share what they learned with colleagues, thus teachers are flexible in finding new ways new ways to present material to make sure that every student understands the lessons especially during the pandemic (Orlando, M. 2013).

Table 4. Coping Mechanisms of Criminology Instructors to Flexible Learning. (n = 20)

Problems Encountered	Coping Mechanism										
	1	2	3	4	5	6	7	8	9	10	11
1. Establishing communication with my students	17	1	0	0	0	0	0	0	0	2	0
2. Having unstable internet access intended for distance learning education	11	2	1	1	0	0	0	0	0	5	0
3. Using of phones, laptops, and tablets or any devices for distance learning education	11	1	0	0	1	0	1	0	0	6	0
4. Using social media, e-mails, and other platforms of distance learning education	9	3	0	0	0	0	0	0	0	8	0
5. Giving instruction and responding to queries through e-mail and messages	12	2	1	0	0	0	0	0	0	5	0
6. Encouraging participation and utilization of features in online classes	15	1	1	1	1	1	0	0	0	1	0
7. Having time management in the conduct of classes, monitoring of responses, availability of students, and other online classes issues.	13	2	0	0	1	0	0	1	0	3	0
8. Having sudden shift from face to face to online classes	7	5	1	0	1	0	0	0	0	6	0
9. Managing the stress caused by community quarantine at home and in between online classes demands.	9	0	1	0	2	0	1	0	0	7	0
10. Beating the deadlines and requirements set by the school administrators.	11	2	0	0	1	3	0	0	0	3	0
11. Establishing a network of communication among stakeholders such as parents for support at home.	11	0	0	0	0	1	0	0	0	8	0
12. Checking and evaluating students' output from e-mail or other platforms	9	3	1	0	0	0	0	0	0	7	0

Legends:
Other coping mechanisms adopted by the Criminology instructors include: *positive reframing, instrumental support, emotional support and humor.* The least coping mechanisms include: *self-distraction, religion, venting or expressing negative feelings and denial.*

Coping Mechanisms	Scale	Descriptive Interpretation
Active coping	*1*	*Doing something about the situation, taking action to negate*
Positive reframing	*2*	*Seeing something good in what is happening, learning from experience*
Humor	*3*	*Making fun of the situation*
Given up coping	*4*	*Giving up the attempt to do anything about the situation*
Emotional support	*5*	*Getting emotional support/advice from friends and family*
Instrumental support	*6*	*Getting help and advice from lectures or tutors*
Self-distraction	*7*	*Doing something to take my mind off the situation such as watching TV, movies, shopping, listening to music*
Religion	*8*	*Praying/meditating*
Venting expressing negative feelings	*9*	*Showing anger at things/people*
Acceptance	*10*	*learning to live with the situation, accepting it*
Denial	*11*	*refusing to believe it happened, not accepting the situation*

V.   SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATION

This chapter presents the summary of the study, the conclusions drawn based on the findings and recommendations offered by the researchers.

Summary of the Findings

The following were the findings of the study. The level of preparedness of the Criminology instructors is *"very high"* as indicated in the composite mean of 3.28, in addition there is a *"high"* support from the institution for them to be prepared as shown in the composite mean of 2.87.

The most effective method used by the Criminology instructors in the flexible learning is through online *chat groups* with the *highest* weighted mean of 3.80. Other methods used by the instructors includes: online lecture notes (3.70); social networking systems (3.45); recorded lecture audio (3.45); recorded lecture videos (3.45); and online discussion groups (3.25).

The *used of phones, laptops, tables or any devices for distance learning education* is the *most* pressing problems encountered by the instructors as shown in the weighted mean score of 3.30 . Other pressing problems "always" encountered by the criminology instructors include: having sudden shift from face to face to online classes (3.35); checking and evaluating students' output from e-mail or other platforms (3.35) and; having unstable internet access intended for distance learning education (3.30). In addition, results of the interview showed that instructors also encountered problems on the submission of outputs on time, absences of students in the video conferencing and the grading system.

The best coping mechanism adopted by the instructor is active coping, that is, doing something about the situation and taking action to negate the problem. The other coping mechanism adopted by the instructor is the acceptance, meaning learning to live with the problem or situation.

Conclusions

Based on the above findings, the following conclusions were drawn.

The Criminology instructors of the Data Center College of the Philippines are highly prepared in the flexible learning, with a high support from the institution. They have adapted different methods in flexible learning, online group chat being favored by them. Flexible learning in the institution is new, so Criminology instructors encountered various challenges in the flexible learning. However, despite these challenges they were able to cope up with this problem through active coping strategy and other strategies. In addition, the results of the study concluded that there is a need to formulate an action plan to enhance the preparedness of the Criminology instructors on flexible learning.

Recommendations

The following are the recommendations of the researchers based from the gathered results.
1. For the management to:
a. Consider the results of the study to provide better instructional support to the instructor.
b. Consider the implementation of the action plan.
c. Provide stress management programs for all employees of the institution.
d. Establish policies and guidelines in the flexible learning and communicate it all the faculty members of the institution.
e. Establish a grievance committee not only for the instructors but also for the students to overcome the different challenges of flexible learning.
2. For the instructors to:
a. Review their methods in flexible learning and apply the best method that may benefit both them and the students.
b. Consider stress management program to protect their physical, mental and emotional health.
c. Join different webinars, workshops trainings for flexible learning.
3. All stakeholders most especially the instructors and teachers may work together to provide a good quality of education despite any change in the educational system.
4. A study be conducted for a longer period of time and more respondents to determine and to yield better and accurate results.

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