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# Readiness of teachers on flexible learning: Basis for a capability-building program

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**ABSTRACT**

This study focused on the faculty members' readiness to use flexible learning at a state university in the Philippines. There were 547 faculty members from all levels completed an online survey questionnaire using the descriptive research method. The faculty members are ready regarding the availability of IT tools and internet connectivity. Still, they are not so much prepared as to their knowledge and competence on using flexible learning. The majority have wireless connections but are considered intermittent. Most of the faculty members use books as their teaching materials. Only very few have learning materials like modules, worktexts, manuals, and workbooks. Most of them are still oriented to face-to-face communication with students and are not familiar with the other equally responsive pedagogies requiring less data usage, or no data usage. Many faculty members have tried using online learning delivery modes, but they are still not confident using them. They have little knowledge about learning management systems and are moderately competent in using them. Based on the findings is the capability-building program which was already implemented and sustained.



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## 1. INTRODUCTION

The COVID-19 pandemic has wreaked havoc on the world's education system. Students' learning would be disrupted, public tests for certifications would be canceled, and internal reviews would be disrupted as a consequence of the global lockdown of educational institutions. It is not sure when the pandemic will end and about how it can further play out. The impact of the crisis continues to be far-reaching, and no one can decipher what it might mean in the longer term for education. However, teaching has to linger with its recourse to homeschooling, although studies prove that, on average, it cannot replace actual learning in school [1]. Correspondingly, homeschooling proceeds online on an untested scale and is likely to increase experiences of inequality, especially on the part of children or students with disadvantaged backgrounds [2].

It is essential to stay connected with the school by any means necessary to mitigate the damaging waves of the pandemic. However, what is to be avoided or minimized as much as possible, Saavedra opines, are the differences in opportunities that significantly add more to the adverse effects of this disruptive crisis. He asserts that academic institutions can do a lot to reduce the impact by using appropriate remote learning strategies that subscribe to various delivery modes [3].

In the Philippines, the Commission on Higher Education (CHED) COVID Advisory directs higher education institutions (HEIs) to exercise their judgment in the deployment of available flexible learning and other alternative delivery modes instead of in-campus learning [4]. The immediately CHED Advisory emphasizes: i) The learning delivery model to be employed by the HEI is dependent on the complementarity of the logistics which the institution has, and the choice students make because of their specific conditions; and ii) The HEI may draw on any appropriate alternative learning platform to implement the learning delivery mode chosen. This advisory makes up the essential components of the so-called flexible learning.

More than a decade ago, several researchers [5], [6] highlighted the lack of a broadly agreed-upon concept of flexible learning. Questions about the aims of teacher education occurred in their meta-analyses, notably along the lines of flexibility and choice, as to which components are flexible or not [7]. Some of the implications for pedagogy and practice in flexible courses were addressed in literature characterizing flexible learning discourses in higher education [8]. Flexible learning was applied a decade later by introducing a variety of educational possibilities [9]. Flexible learning was also portrayed as a holistic solution to help universities become more responsive and relevant [10].

With the foregoing premises, flexible learning relates to a curriculum that allows students to have their own pace, place, and mode of delivery (when, where, and how they learn) [11]; a curriculum that allows students select where and when they learn; one which profits both non-traditional students and students who live far away [12]. Likewise, rising student diversity needs a curriculum that is adaptable to and is accessible to students with varied needs and abilities [13]. Course designs and responsive pedagogies are essential in this lane for students enrolling in flexible forms of learning [12].

Central to the flexible learning environment is knowing how to select the mode of learning delivery and the learning platform appropriate to a given context, which either requires no data usage or less data usage or online tools. The term flexibility is primarily associated with pedagogies. Parts of education can be delivered digitally to remote locations, allowing students to study whenever and wherever they want, allowing organizations to be more responsive to all students [14]. The latter standpoint suggests today's inescapable reality of embracing online learning, which Anderson postulated earlier as the integrative online theory of learning (IOTL). Terry Anderson assumes that online education has progressed as a subcomponent of learning as a whole and not just specifically a subcomponent of distance learning since it serves as the foundation for a more comprehensive model [15]. Also, IOTL will likely be coupled with what Linda Harasim proposes as online collaborative learning (OCL). According to Harasim, OCL is a new learning theory that emphasizes collective learning, knowledge building, and internet use in order to reshape formal, non-formal, and informal education for the knowledge age [16]. ICT undeniably improves teaching efficiency and assurance of quality. They built their initiative on this premise, which focuses on the development and pilot testing of approaches and technologies that might help teachers and students enhance their teaching and learning quality [17].

Every educational system's success and development, as well as that of any organization, is determined by the quality of its human and material resources. Human resources appear to be the most crucial component in the education system because, without teachers as pivots, all other factors are inept [18]. Teachers must adapt to new standards. Their method of teaching or learning delivery will no longer be an option. Capacity development is in place. Adult learning theory presents the term "andragogy" (instead of pedagogy) to refer to adult learning. It is a pursuit of learning that is self-directed and based on the adult's prior experiences. Self-directed learning is an interesting strategy because of its usefulness in satisfying a person's need to learn about wide range of topics, especially in this digital era [19].

The concept of adult learning vis-à-vis flexible learning expands to the attitudes and circumstances of teachers. Research findings reveal that the teacher educators expressed the importance of teacher-related conditions regarding curriculum flexibility [20]. As a result, instructor attitudes hampered curriculum flexibility. However, even with adults, there is a lot of room for change in the classroom. It is within this realm that the Mezirow's transformative learning theory sets in. This theory proposes that adults have the capacity for perspective transformation through the disorienting dilemma and independent thinking. This type of thinking gives rise to a critical reflection model of learning, which is essential in changing a faculty member's viewpoints about their function as teachers [21], [22].

Within the capacity development process for competence in flexible learning is the necessity to conduct a capacity needs assessment of the faculty. Since capacity development is a process rather than a blueprint or product [23] that affects multi-level change in organizations, individuals, and systems, capacity needs assessment is embedded in a series of capacity-building programs to enhance self-adaptive capabilities. The aim of capacity needs assessment is to evaluate existing competencies and future necessities to identify capability gaps. Doculan emphasizes in her study on the e-learning readiness (ELR) assessment tool for Philippine higher education institutions that an organization or institution must be assessed before the benefits of e-learning can be experienced and enjoyed; assessment is required to determine the requirements

and factors that have a direct impact on their readiness [24]. Functional knowledge is considered crucial on the level of digital competences to prevent unequal educational development with respect to ICT implementation into the educational process as per an analytical comparison of digital competence within the Slovak and Irish National Educational Systems [25]. However, the inadequate definition of digital competence within primary education programs leads to intra-European educational divergence, which could lead to educational downturns on a national scale [26].

Nevertheless, an evaluation of the knowledge and skills needed by the faculty does not just revolve within the realm of digital technology. Effective use of online teaching requires more than technology-related skills [27]. Skills in content development, learning activities, teaching strategies, and assessment are essential for the faculty. The development of these skills should be executed in the integration of content, pedagogy, and technology. Technological pedagogical content knowledge (TPCK) is an integrative theory of online coursework that recognizes the complexity of good online instruction [28]. This learning theory reiterates the indispensability of a prior, proper, and genuinely comprehensive assessment on which to ground capacity-building programs. The teaching staff would be equipped with a range of abilities and tools at their disposal [29]. However, the degree to which technology is integrated into education is determined by the subject, preferred teaching style, teacher competence, and other factors [30].

Through the years, the University of Northern Philippines engaged in traditional face-to-face learning modalities with online or blended learning in some programs. When the onset of COVID-19 pandemic in March of 2020 shut down regular classes for the second term, migration to flexible learning was swift and urgent. Most instructors and professors were caught unprepared. Many faculty members went into trial and error in their learning delivery modalities. Issues of teacher control and student engagement emerged. But as a state higher education institution, University of Northern Philippines (UNP) has always struggled to provide optimal academic competence, proper attitude, and skills to learners even at a pandemic. Before the advent of the succeeding school year 2020-2021, however, the institution found the need to inquire into the readiness of its faculty on flexible learning.

Therefore, this study was introduced with its primary objective of determining the faculty members' readiness to use flexible learning. Specifically, it sought to be apprised of the information technology background of the faculty, their availability of teaching and learning materials, their learning delivery modes, their confidence in the use of IT in the delivery of learning, and their knowledge and competence on and in the use of the learning management system (LMS). It also looked into the problems they encountered with their use of IT in teaching-learning and their training needs. Moreover, the study aimed to propose a research-based capability-building program, whereby the findings pertinent to the faculty's actual stance would serve as the specific grounding of their capability-building program.

## 2. RESEARCH METHOD

### 2.1. Research design

The descriptive research method, specifically survey research was used in this study. Survey research entails asking a sample of people questions in order to describe, compare, and correlate [31]. Survey method was employed among faculty members to describe their readiness in the use of learning deliveries.

### 2.2. Population

The study respondents are 547 faculty members in the University of Northern Philippines at all levels (moving up, elementary, junior high, senior high, college, and graduate). It is comprised of an almost equal number of males and females. Most of them are within the age range of 41-60, live in the Poblacion barangays of the rural areas. Concerning the respondents' professional attributes, most of them hold permanent status, occupy the instructor position, and have obtained their master’s degree.

### 2.3. Data gathering instrument

The data gathering instrument used is an E-survey Form made from Google Docs. The researchers made the survey form simple, wherein the respondent would only tick on the appropriate choice/s and write simple information. The instrument is made up of ten parts to collect data from faculty members on the following: personal information, professional information, information technology background, available teaching materials, learning delivery modes used before the enhanced community quarantine (ECQ), alternative learning modes during ECQ, confidence in the use of IT in learning delivery, knowledge gained, and competence in the use of LMS, problems met in the use of alternative learning, and training needs.

The part on the confidence in LMS used a five-rating scale with "1" as the lowest (very low confidence) to "5" (very high confidence). In addition, the part on the knowledge and competence on and in the use of LMS, a five-rating scale was employed with "1" as the lowest (no knowledge at all, and not competent, respectively) to "5" (very adequate knowledge, and very highly competent, respectively).

### 2.4. Data gathering procedure

Since the data gathering instrument is in google form, the study utilized the online data gathering method. The researchers requested the use of the text connect of the university in disseminating the survey. The researchers included in the message the link where the instrument was saved. The members of the faculty opened the link and provided the necessary information needed in the study.

### 2.5. Ethical considerations

The research was conducted without conflicts of interest. The respondents are faculty members in the university and were provided with information concerning their participation in the study. A part of the questionnaire informed the respondents of the nature and objectives of the research endeavor and the benefits gained. Moreover, all the faculty members could participate, but the researchers just solicited their voluntary participation. Thus, before the respondents answered the questionnaire, they were asked to answer a portion indicating their willingness to participate. There was no compensation given to the respondents for answering the questionnaire. Data from each respondent were treated with the utmost confidentiality. The researchers used codes for the names, kept the files in a locked cabinet, and stored the data file with a password that only the researchers have the access. After two years, the data will be deleted. The results may benefit all the faculty members, the administration, and eventually, the students. The output, particularly the proposed capability-building program on flexible learning, is an essential contribution for the faculty members and the administration in their quest for quality education even during the period of crisis, whereby the students will be able to learn anytime, anywhere, and in any manner depending on the availability of resources.

### 2.6. Treatment of data

The study used the frequency count and percentage to describe the respondents' personal, professional, and IT profiles and the most common learning modalities. Meanwhile, the weighted mean was employed to determine the respondents' confidence level on IT use in teaching, the level of knowledge and competence, and the use of LMS. The statistical analysis used in the study was guided by the worktext developed by the authors [32].

## 3. RESULTS AND DISCUSSION

### 3.1. The readiness of the faculty on flexible learning

The readiness of the teachers on the use of flexible learning was measured in terms of several factors. These include the availability of IT tools, internet connectivity, and access to teaching materials. It is also measured in terms of learning delivery modes, confidence in the use of IT, knowledge, and competence in the use of LMS.

#### 3.1.1. Information technology background of the respondents

Figure 1 and Figure 2 reveal that almost all of the faculty have mobile phones, particularly smartphones. A great majority of them possess laptop. Only a few of respondents own a tablet/iPad, and only a handful maintain a desktop PC.

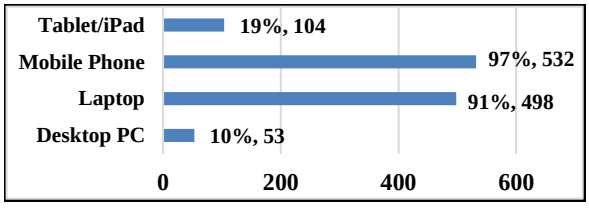


Figure 1. IT tools available

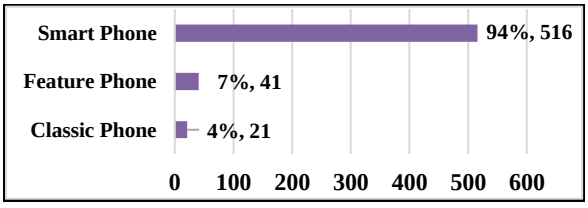


Figure 2. Types of mobile phone used by faculty

Figure 3 shows that many faculty members have wireless internet access, some have wired internet access, and just a small number do not have internet access. However, Figure 4 shows that most of those with internet access have an unstable and slow connection, while only some have a stable and fast connection. As in Figure 5, a great percentage of those with an internet connection have limited data and quite a few have unlimited data. Among those who cannot access the internet at home, a good number gain access through the school's internet connection. On the use of social media, Figure 6 presents that a great majority of the faculty members use Facebook messenger, many use Facebook, some use Instagram, and just a few uses Twitter.

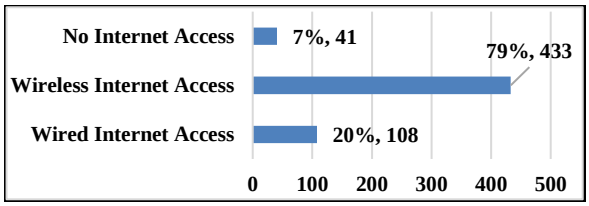


Figure 3. Access to internet

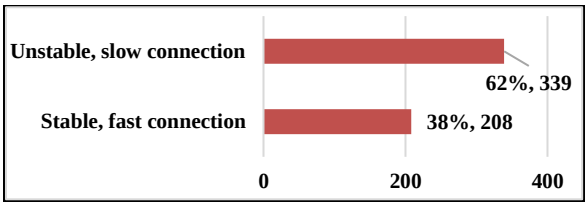


Figure 4. Quality of internet connection

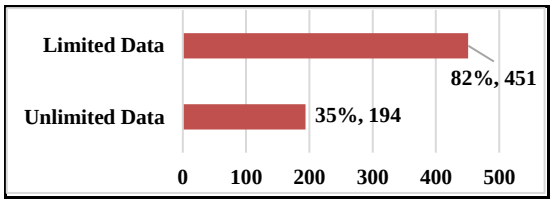


Figure 5. Internet data allocation

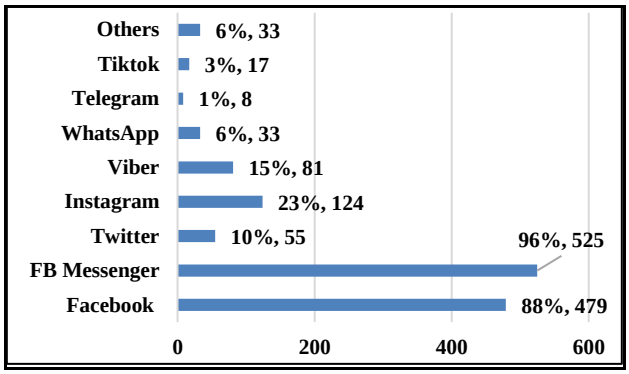


Figure 6. Social media use

### 3.1.2. Availability of teaching and learning materials

Figure 7 lays down the available learning materials and means, to include the media, which the faculty can use. Nearly all faculty use books in most of their learning activities. This is followed by their recourse to PowerPoint presentations, downloaded learning materials like eBooks, journals, articles, pictures, videos, and other hand-outs. However, only a few have learning modules, manuals, workbooks, educational software, worktext, pamphlets, and other teaching materials.

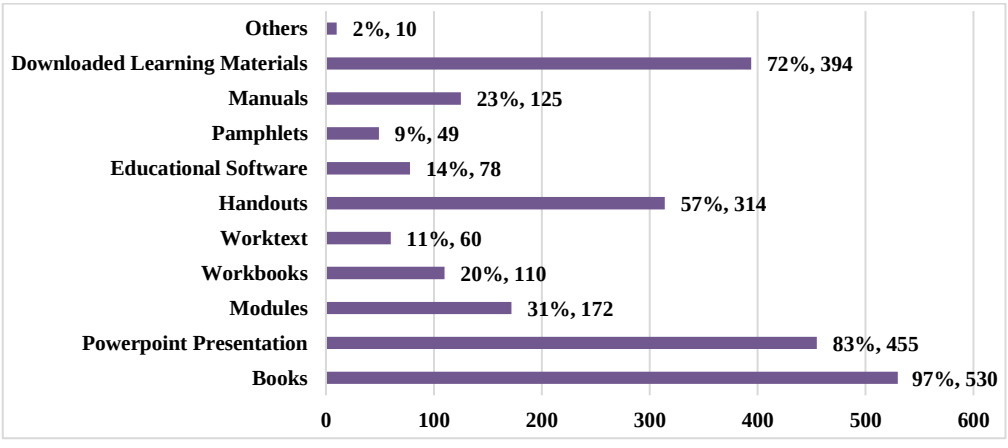


Figure 7. Availability of learning materials

### 3.1.3. Learning delivery modes used

The COVID-19 invasion and subsequent implementation of the ECQ resulted in a significant shift away from face-to-face learning and toward the use of digital technologies or the internet. Figure 8 illustrates this. Before the ECQ, the notable percentage of faculty engaged in group chat-class through Facebook Messenger went up to an impressive percentage. Although messenger group chats require a mobile internet connection, Facebook, accessibility to it can still be obtained even without using a data plan. One has a compatible device and a mobile network to deliver and receive text types of messages.

Also, before the ECQ, text messaging leaped higher. Most faculty shifted to this mode of learning delivery, for it allows the users to exchange messages with just the use of any mobile phone and a mobile network connection. Relative to this, many of the faculty took as problems encountered the situation of many students who had limited internet access (87%) or had no internet connectivity at all. There were also increases of percentage as to the following delivery modes during the ECQ: e-mail, Facebook group, via mail/correspondence, and video conferencing.

Likewise, during the ECQ, the past engagement of the faculty in LMS platforms like Google Classroom, Schoology, Edmodo minimally glided to just a percent higher. This shows that only a few of the faculty opted to use any of these platforms in the community quarantine due to the constraints and limitations of internet connectivity. It caused difficulty in communicating with students and sending learning materials.

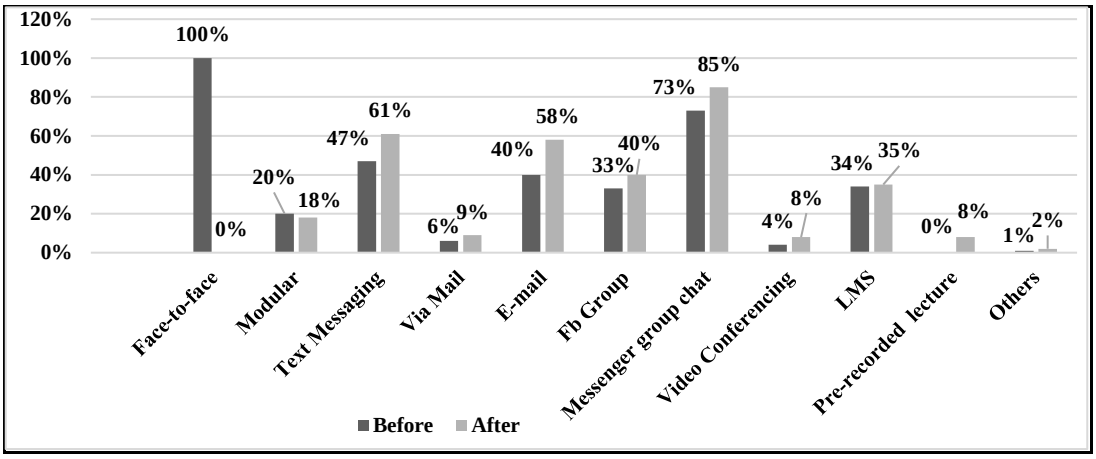


Figure 8. Modes of learning used by faculty before and during ECQ

### 3.1.4. Confidence in the use of IT in the delivery of learning

Based on Table 1, the faculty possess high confidence in using IT in the delivery of learning. Specifically, they have high confidence with the Messenger group chat, Facebook group, and e-mail. However, they have average confidence about the use of LMS and video conferencing.

Table 1. Confidence of faculty on the use of IT in learning delivery

| Modes of learning | Mean | Level |
|---|---|---|
| E-Mail | 3.82 | High |
| Facebook Group | 3.98 | High |
| Messenger Group Chat (Facebook Line, Telegram) | 4.17 | High |
| Video Conferencing (Zoom) | 2.85 | Average |
| Learning management system (Google Classroom) | 2.95 | Average |
| Overall | 3.55 | High |

The remarkable confidence of the faculty on the use of the Messenger group chat may be attributed to the observation that the majority have familiarity with instant messaging applications such as the features of Facebook and Facebook messenger. They spent the time uploading, reading, commenting, and sharing posts or documents through this platform [33]. The average confidence of the faculty members in using LMS platforms may be ascribed to unfamiliarity there of [34] and lack of training relative to it. That only about 1/3 of the respondent-faculty have been using LMS platforms in their classes before the ECQ, or have used them

in its course, may also assert such confidence level. Coleman and Mtshazi add that training may be enough to enable users to gain knowledge, confidence, and competence in the system's basic features deemed valuable and applicable for their classes [35]. That available technical support to help despite any problems that may surface regarding the system will increase the confidence of using the said platforms.

#### 3.1.5. Knowledge and competence on and in the use of LMS

Table 2 speaks of the knowledge of faculty on the use of LMS and with respect to their competence. Using a LMS necessitates knowledge and skills in order to take advantage of all of its features. Overall, the teachers have little knowledge of the use of LMS platforms. Therefore, they are moderately competent in operating them.

Google Classroom is one of the features attached to a google account. The teachers have moderate knowledge and are moderately competent using the Google classroom compared to other LMS platforms. The circumstance may have influenced this that most faculty utilizing LMS adopt the google classroom as their platform. However, such moderate knowledge and competence reflect that many of the faculty have not discovered or fully explored the features that the Google Classroom possesses.

Schoology is similar to the Facebook platform, but it incorporates LMS features like attendance, student assignments, and homework [36]. It provides the option for teachers to divide resources and materials into groups based on various topics [37]. The statistical data reveal that the faculty have little knowledge and are moderately competent in the use of Schoology.

Edmodo is similar to Facebook as to LMS features. It is widely used by educational institutions all over the world because of its user-friendliness, free and secure online environment, top teaching and learning websites that foster innovation and creativity, literacy learning, and communication capabilities [38]. On the contrary, the faculty have little knowledge and moderate competence on the use of Edmodo.

Moodle is one of the widely used open-source LMS options available today, which, like Schoology and Edmodo, can also be used on any device [37]. Moodle is a LMS with open-source platform modules customized according to user needs [39]. Furthermore, it features dashboards, learner tracking, and multimedia support; and it allows creating a mobile-friendly application through integrating third-party add-ons [40]. Nonetheless, the faculty have still little knowledge and moderate competence on the use of Moodle.

Kahoot! is a game-based digital student response system allowing teachers and learners to interact through competitive knowledge games in a classroom setting. This platform is ideal for motivating and engaging students while also assessing their understanding of a lesson in a fun way [41]. Notwithstanding these promises of fun, the faculty possess little knowledge and are moderately competent on the use of Kahoot!. On the same plain, the faculty know a little and has moderate competence in using the other LMS platforms such as Docebo and WizIQ. The faculty members know a little about other platforms like ezTalks, LearnCube, and Jitsi. They are either moderately or not at all competent in operating them.

Table 2. Knowledge and competence of faculty on the Use of LMS

| LMS Platform | Knowledge | | Competence | |
|---|---|---|---|---|
| | Mean | Level | Mean | Level |
| Google Classroom | 2.69 | Average | 2.49 | Low |
| Schoology | 2.26 | Low | 2.09 | Low |
| Edmodo | 2.25 | Low | 1.66 | Very low |
| Moodle | 1.69 | Very low | 1.69 | Very low |
| EzTalks | 1.39 | Very low | 1.60 | Very low |
| LearnCube | 1.60 | Very low | 1.51 | Very low |
| Docebo | 1.59 | Very low | 1.59 | Very low |
| WizIQ | 1.60 | Very low | 1.60 | Very low |
| Jitsi | 1.59 | Very low | 1.50 | Very low |
| Overall | 1.85 | Low | 1.75 | Very low |

### 3.2. Problems in the use of IT in the delivery of learning

The faculty revealed that not all of their students have smartphones, or students do not have laptops/computers. Most of their students use prepaid internet services, because of which they would run out of budget, particularly when there is no or low flow of income to the household. Also, only a few shifted to the use of LMS platforms because either the teacher or the student lacked the competence and confidence on how they would handle the features of the LMS platforms.

Observably, during the ECQ, there was an upsurge from a zero percentage to 8% on the use of pre-recorded video/audio discussions uploaded for the students for asynchronous viewing. However, the use by the faculty of the Modular platform before ECQ (20%) downshifted to 2% during the ECQ (18%). One of the

problems encountered during the ECQ was the claim of the majority of the faculty that students did not have learning materials such as books, modules. Almost a majority of the faculty admitted that no available/sufficient learning materials could be sent to students.

### 3.3. Training needs

Figure 9 shows that a great majority of the faculty need training along with flexible learning, use of LMS, development of instructional materials, and use of IT in learning delivery. These needs are consistent with the earlier findings. These results also accentuate that flexibility has become the norm, not an exception, and flexible learning is the appropriate modality for the new normal education. Thus, orientations and training on learning delivery schemes focused on the LMS platforms and IT are necessary. Nevertheless, flexible learning is not purely online learning and does not necessarily require internet connectivity. Instead, it focuses on the design and delivery of courses, programs, and learning interventions dependent on the faculty's capability and the varied needs of the learners in terms of pace, place, process, and products. Hence, equally integrative programs aim to mentor and guide the faculty to develop research-based instructional materials.

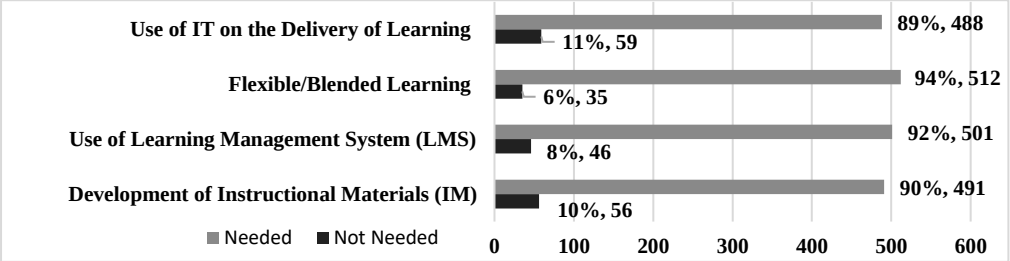


Figure 9. Training needs

### 3.4. The capability building program on flexible learning

Based on the findings, a capacity-building plan is proposed for possible utilization in the university. This is important to improve the capability, competence, and confidence of the faculty members for the New Normal Education. It is entitled capability building program on flexible learning (CBPFL).

The proposed CBPFL is composed of a series of training to provide the faculty members with adequate preparations in terms of knowledge and competencies of and use of flexible learning deliveries, competencies in developing instructional materials of varied forms, and learning platforms to make teaching effective and efficient. Its approach is anchored on the concept of collaboration and empowerment. It is designed to bring together the faculty members to honestly assess themselves as to their readiness in the use of flexible learning, officers in various units and offices to give their insights on how the University can respond to the challenges of the New Normal Education. It also recognizes partners in academic institutions and the potentials of IT experts in the University who can be tapped as trainers and lecturers. It also considers the IT and other resources of the university and the health safety preventive measures such as wearing facemasks and practicing social distancing during the training proper.

The proposed program aims to equip the faculty members with adequate knowledge and competencies on varied learning delivery modes; assist them in revising course programs and in preparing a modified course for the New Normal; capacitate them in developing instructional materials, and help them maximize the use of IT in learning delivery. It aims to introduce the faculty to the virtual learning environment and capacitate them to use LMS platforms as alternative learning delivery in the university. It, likewise, aims to develop their competencies in preparing multimedia presentations, equip them with various online assessments, and train them in video conferencing.

CBPFL also consists of training interventions that are classified within three subprograms. They are: i) Flexible learning options; ii) Development of instructional materials; and iii) Use of IT in learning delivery and assessment of learning outcomes. The implementation plan with preliminary and implementation phases, monitoring and evaluation, sustainability, and budgetary requirements are also included in the proposed plan.

The proposed training program was presented to the Office of the President for implementation in the university. Through the Office of the Vice President for Academic Affairs, the program was implemented in a period of six weeks, and it was participated in by all the faculty members in the university. After the training, the competencies of the faculty members in the use of flexible learning, and the transfer of the knowledge and skills gained during the training were properly monitored by their immediate supervisors.

To ensure the sustainability of the CBPFL, a continuous training of the faculty members, and monitoring of their competencies in using flexible learning will also be done. Selected faculty will be further capacitated by national and international experts. These trained members will act as trainers in future trainings along recent modes of learning delivery in the university. Also, included in the CBPFL is a recommendation on the establishment of an IT Center in the university that is fully equipped with IT gadgets and peripherals, and to be manned by IT experts. The IT Center will continuously cater to the IT needs of the university, specifically to the faculty members and students.

The research-based CBPFL follows the pragmatic direction which highlighted a framework for the scalable expansion of flexible learning through the provisions of faculty development opportunities, course design services, and learning technology support [10]. The CBPFL explicitly asserts two of 11 aspects of Andrade and Alden-Rivers' framework where the university would invest in its faculty members by expanding their capacity in terms of skills and expertise. Aspect 2 on instructional design - the principal mechanism of which was a research-informed, workshop approach - addressed the capacity-building of faculty needed to achieve expanded flexible learning opportunities. Aspect 9 on faculty development and recognition was introduced to enhance and sustain their ability to teach effectively across flexible teaching and learning modes.

## 4. CONCLUSION

In terms of readiness to use flexible learning, the faculty members of the University of Northern Philippines are ready in terms of the availability of IT tools (mobile phone, laptop, tablet/IPad, desktop PC). Generally, they have internet access (although the majority have a wireless connection with limited data allocation, at times unstable or slow connection quality). However, the faculty is not so much ready as to their knowledge and competence on flexible learning. Most of them are still oriented to face-to-face communication with students. They are still not familiar with the other equally responsive pedagogies that require data usage, less data usage, or no data usage; a good number have tried using online learning delivery modes, yet they still consider themselves a novice. Reasonably enough, there are just a few who are not up to scratch on IT skills. Based on these, the capability-building program will zero in on two areas. The first area is skills training on the development of instructional materials (e.g., pamphlets, worktexts, educational software, manuals, workbooks, modules) to address the need for more learning and teaching resources. The second area is on coaching with drills on using LMS platforms like Google Classroom, Schoology, Edmodo; and the use of IT (e.g., video conferencing) in the delivery of learning.

Therefore, the researchers recommend conducting a series of training. The trainings should focus not only on delivery of learning but also on the development of instructional materials, and assessment of learning outcomes. It is important to develop the faculty members' competence and confidence in using varied alternative modes of learning and IM development by sustaining the implementation of the CBPFL in the university.

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