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Digital learning framework for police mandatory courses: Implications on the design of flexible learning management system for public safety

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ABSTRACT

Keywords

effectiveness ease plans criteria for evaluation benefits bottlenecks This study was carried out to assess the adoption of digital learning design for police mandatory leadership courses. It employed a sequential explanatory mixed-method research design, which involves collecting and analyzing quantitative data from respondents first, followed by collecting and analyzing qualitative data from informants. In terms of their perception towards the adoption of digital learning, results revealed that the police students strongly agree on the overall benefits and the plans and criteria for evaluation. Spearman's Rho correlation result also revealed a significantly high positive correlation and relationship among the police students' perception on effectiveness and ease, plans and criteria for evaluation, and overall benefits (rs(117) = 0.824, p<.001); (rs(117) = 0.798, p<.001); and (rs(117) = 0.879, p<.001) respectively. Issues on connectivity, data limit, data speed, interaction, intense requirement for self-discipline, and instructors' competency are some of the bottlenecks they encountered in digital learning. Therefore, it is highly recommended that the training center must seriously consider upgrading the storage capacity of its instructional management system; allocate monthly budget to increase data or storage capacity; offer free internet with strong connectivity for all police students undergoing the training inside the training center; and upskill its personnel handling digital learning and the instructors who use digital platforms to increase their digital literacy and digital fluency and to ensure sustainability, efficiency, and continuity of digital learning which are all integral facets of its flexible learning management system.

I. Introduction

The use of information and communication technology (ICT) has increased substantially in recent years, providing learning and education to more people around the world. Educational sectors throughout the world are increasingly relying on various electronic technologies known as digital learning to support and enhance their learning and teaching operations (Kisanga & Ireson, 2015). Indeed, digital learning has become an accepted part of everyday life, changing distance education efforts in the contemporary times (Bigirwa, Ndawula, & Naluwemba, 2020).

As an oft-cited term that includes variety of applications, processes and learning methods, information and communication technologies (ICT) are used to give students with access to collaborative settings and resources, as well as online learning, through digital learning (Prensky, 2010). As a result of fast technological progress, an increasing number of institutions are using internet-based course delivery and have made significant investments in technology.

The Internet has evolved into one of the most significant tools for students to exchange and receive knowledge. Today's students are known as "digital natives," or users who grew up with technology such as computers, cell phones, and the Internet. Furthermore, in the milieu of the World Wide Web, information and communication technology greatly improves communication choices (Rossi, 2009).

With the status quo, the coronavirus pandemic has changed the connection between professors and students in higher education and changed the teaching learning process. Educational institutions, as a result of infectious diseases, had to carry out all activities with students online. In this regard, numerous governments throughout the world have made efforts to keep the virus from spreading and to keep the educational process going, leading to the adoption of digital learning (Sobaih, Hasanein & Abu Elnasr, 2020; Ali, 2020). In many cases, internet-based learning is seen as an alternative to traditional education and it is an important component in opening schools and learning institutions globally so that the continuity of schools and learning institutions is not compromised. As a result of this paradigm shift, it is likely that students' feelings about this kind of education will shift into a unique era and that their perceptions may differ from those documented in previous studies prior to the onset of pandemic (Dhawan, 2020).

In the context of Regional Training Center 12, one of the police training centers nationwide that meets the training requirements of Region 12's three public safety bureaus, the adoption of blended learning approach is its defensive mechanism to ward off the foreseen and unforeseen instructional deficiencies and carry on with the implementation of the program of instruction for all courses with flexibility. The institution sees blended learning as a highly-innovative concept in education and training engendered from the concoction of face-to-face instruction or classroom-based training and digital learning supported by information and communication technology (ICT) or digital technologies.

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In its current implementation, the maximization and utilization of digital learning platforms exposes the police students to the digital aspects of the course creating a conducive space for an interaction with their instructors in cyber space irrespective of geographical boundaries. Diving in with this approach is seen as a conduit towards digital fluency among the police officers.

The mixture of digital learning and classroom-based instruction paves the way for the thriving blended-learning approach in the bounds of this training center. For years since its adoption, it has proven its flexibility and resiliency leveraging on the strengths and capabilities of human resources and facilities. The challenge now lies as to how the implementation of this modality is sustained and improved considering that the influx of courses is catapulting at a faster rate and the entire process is still in its transitionary phase. Hence, this study was carried out.

II. Review of Related Literature and Studies

The Components of Digital Learning

The adoption of digitally-aided curriculum in higher education concentrates not only on the expansion and modernization of educational technology, but also on improving the quality of education (Al-Awidi & Aldhafeeri, 2017). In this contemporary time, we are now moving to traditional types of learning with a focus on information technology and systems.

The organization of learning processes in a digital learning environment is an important and growing element of academic activity. As defined by Garrison (2011), electronic learning is the use of electronically-mediated synchronous and asynchronous communication to generate and validate knowledge (Industry Report, 2014). Sales, customer service, management, and leadership development are some of the areas of education that rely less on online learning. Advances in interpersonal relationships, or "soft" skills, are typical components of these educational domains, and can be thought of as most beneficial in a formal classroom setting.

The level of participation in Internet-based education, the number of online courses, its subjects, different methods of implementation and overall focus are all contributing to the creation of a broader concept of electronic learning. Remote knowledge exchange and collaboration; access expansion to resources and services using new multimedia technologies and the internet; Training that is stimulating and informative; and use of interactive means of providing technical knowledge, such as CDs, corporate networks, and the Internet, forms part of all electronic learning or eleaning (Gerasimova et al., 2018).

Advantages of Digital Learning

In addition to its original goals, distance learning through online learning not only helps improve the quality, level, and efficiency of traditional and learning methods, but is also a great complement for face-to-face education. The principal benefits of digital learning were emphasized by Kovaltchuk et al., 2016; Eady & Lockyer, 2013. Accordingly, digital learning provides virtually unlimited degrees of freedom of access via the Internet, allowing students to connect to global information network and access e-course resources from anywhere. Digital learning can be a competent, high-quality education to become a modern, high-quality education with the participation of a whole team of highly-trained and competent professionals in digital learning as well as in design. Moreover, utilizing a virtual platform requires low cost since the learning process comprises simply the exchange of information via the Internet, with no additional expense to the learner for the purchase of instructional resources.

There is also the option of modularizing the content of electronic course with digital learning, since there are minute blocks of knowledge that drives learning to be more flexible and make it simpler to discover the essential resources. Furthermore, e-learning or digital learning, allows for a more flexible training schedule. Finally, with digital learning, the students and the teachers will have quick access to the most recent curriculum updates, allowing them to continuously enhance and improve their acquired knowledge and skills akin to the most recent informational technologies and educational standards.

Digital Tools

In the study conducted by Pappas (2015), students identified evidently some digital learning's advantages like flexibility, time savings, ease, and quick access to previous educational content. This is corroborated by Purcell et al., (2013) in studying the impact of digital tools in writing and how to teach writing at school. Results revealed that students and instructors can connect with the curriculum using an array of digital tools driven by the advances in digital technology. Students and teachers can access primary source learning materials using innovative technologies purposely to collect and to record data, to make communication with, and to exchange both teaching and learning experiences so that students can demonstrate and display their knowledge (Al-Awidi & Aldhafeeri, (2017).

Other electronic resources, such as Twitter, blogs, wikis, and YouTube can supplement the digital curriculum while other application can be utilized to engage, educate, and measure students' learning outcomes (Moeller & Reitzes, (2011). Teachers and learners are likely to stay associated to these resources throughout the learning process and to customize their online learning experience via the utilization of technology. In recent time, learning institutions take advantage of Zoom, Google Meet, Google Classrooms, Schoology, and other online platforms.

Educational Institutions and Digital learning Platforms

In higher education, digital learning is accomplished via the use of numerous online platforms. Many terms have been used to characterize online learning over time, including computer-mediated learning, web-based training, digital learning systems, and learning management systems (Anaraki, 2004; Costa et al., 2012).

Regardless of their names, these virtual systems make use of the Internet and have specific characteristics that allow specific mechanisms like registration, assessment of learners and instructors' actions, and also assist the delivery of lectures and interaction between students, their colleagues, and professors.

Some of the most important functions of online learning platform covers forums that allow communication and asynchronous collaboration between students and teachers, web conferences that allow communication by video, audio and written, and chats that allow users to send messages and receive responses in real time (Cacheiro-Gonzalez et al., 2019).

To maximize digital learning, the Learning Management System (LMS), a software that runs and contains many services, designed to help teachers manage their lectures and courses must be used (Ouadoud et al., 2017; Ninoriya, et al., 2011). It is especially designed to monitor and evaluate students, grade, manage course attendance, and perform other administrative tasks according to the needs of academic and learning institutions. These systems fall into two categories: open source Moodle platforms and commercial or proprietary platforms such as Blackboard (Dagger et al., 2007).

III. Methodology

The study employed a sequential explanatory mixed-method research design, which involves collecting and analyzing quantitative data from respondents first, followed by collecting and analyzing qualitative data from participants. This technique was used on purpose to elicit information from informants in the form of a collection of suggestion proposals for instructional implementation enhancement. The Regional Training Center 12 was chosen as the source of data generation being the research locale. Quantitative data were obtained from the responses of the selected respondents from the results of the survey using a questionnaire adopted from Muthuprasad et al., (2021) and was modified and localized by the researcher himself to be relevant in the context of RTC 12.

To gather recommendation inputs for the instructional implementation enhancement, the respondents, after answering the survey forms, were required to answer essay questions and to write down their narratives (recommendations) in order for the training center to meet the current situation and to improve the utilization or adoption of digital learning. Responses were analyzed and classified into themes.

IV. Results and Discussion

A. Digital learning platforms used during the course implementation

The frequency count revealed that the most used platforms were Zoom, Facebook messenger, and Google classroom. As gleaned on the table (Table 1), 100% of the respondents used the said platforms for instructional delivery during the course.

Virtual platforms use during instructional delivery	Frequency	Percent		Cumulative Percent
Zoom, Facebook/messenger, Google Classroom	117	100.000	100.000	100.000
Missing	0	0.000		
Total	117	100.000		

Table 1. Frequencies for the virtual platforms used during instructional delivery

According to Villanueva and Nuñez (2020), some higher learning institutions in the Philippines used online means to keep classes going when the lockdown was enforced. Google Classroom, Google Hangouts, Skype, Facebook groups, Messenger, and Zoom were just a few of the most widely utilized programs in the country for holding lessons online. During the onset of the pandemic early in 2020, the Regional Training Center 12 adopted the utilization of available digital technological platforms specifically Zoom for teleconferencing, Facebook messenger for immediate updating, and Google classroom as learning management system (LMS).

B. Perception on the adoption of digital learning

The police students strongly agree on the overall benefits (M= 4.299, SD = 0.519) and the plans and criteria for evaluation (M= 4.272, SD = 0.470) of the adoption of digital learning. However, in terms of effectiveness and ease of the digital learning (M= 4.134, SD = 0.516), police students agree of the said adoption.

Effectiveness	Plans	Benefits
117	117	117
0	0	0
4.134	4.272	4.299
0.516	0.470	0.519
2.286	3.000	3.143
5.000	5.000	5.000
	117 0 4.134 0.516 2.286	117 117 0 0 4.134 4.272 0.516 0.470 2.286 3.000

Table 2. Descriptive statistics on the perception of digital learning adoption in terms of effectiveness/ease, plans, and benefits

Police students strongly agree that digital learning provides benefits like flexible schedule, convenience, more comfortable environment, technical skills improvement, greater ability to concentrate, and self-discipline and responsibility.

Muthuprasad et al., (2020) found that flexibility of scheduling and convenience were regarded as the primary advantages of digital learning. Online education gives students the freedom to study when and how they choose. Because of this, online education is in high demand due to the ease and flexibility it offers. Digital learning also has the added advantages of providing a more comfortable learning environment, improving technical skills, increasing interaction, and improving concentration and self-discipline and responsibility.

Moreover, police students strongly agree that there has been a suitable duration for online classes given, weekly training schedules are posted prior to online teaching, invited instructors are proficient in their field and in using virtual platforms, instructors give action items (performance tasks) to reinforce learning, they are given enough time to submit their outputs, modular examinations are conducted with enough preparation, and questions in the online exams encourage critical thinking.

As cited by Fitzpatrick (2012), leaders in education must be aware of the potential aspects of their online programs so that they may make well-informed plans and decisions that benefit students. Teaching-learning may be more systematic and structured by using good planning and criterion evaluation, therefore establishing an area for the development of high-quality training (Tripathi & Kumar, 2018).

C. Relationship on the students' perception

Assumption Check

	Effectiveness	Plans	Benefits
Valid	117	117	117
Missing	0	0	0
Shapiro-Wilk	0.912	0.899	0.881
P-value of Shapiro-Wilk	< .001	< .001	< .001

Table 3. Descriptive Statistics on the use of Spearman's Rho as a statistical tool for correlation

Before deciding to an inferential statistical treatment, the researcher tested for the normality of the variables using Shapiro-Wilk's test. It has been found that the data are significantly different from a normal distribution with a p-value of greater than .05 (p = .001). It has also been found out that there seems to be that there is no linear relationship between variables and significant outliers can be found as seen on the scatter plot (Figure 1). This proves that the most appropriate statistical test to use is Spearman's Rho.

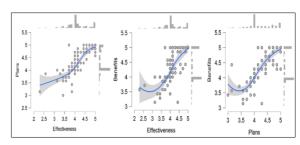


Figure 1. Scatter Plot Diagram for Shapiro-Wilk's test

Spearman's Rho correlation was used to assess the relationship between the police student's perception on effectiveness and ease of digital learning and plans and criteria for evaluation. Spearman's Rho correlation indicated that there is a significant high positive relationship between the two, (rs(117) = 0.824, p < .001).

		Spearman's rho	р
Effectiveness	- Plans	0.824	< .001
Effectiveness	- Benefits	0.798	< .001
Plans	- Benefits	0.879	< .001

Table 4. Spearman's Correlations

The test also indicates that there is a significant high positive relationship between the police students' perception on effectiveness and ease of digital learning and overall benefits perception, (rs(117) = 0.798, p < .001), and the test also shows that there is a significant high positive relationship between the police students' perception on plans and criteria for evaluation of digital learning and overall benefits perception , (rs(117) = 0.879, p < .001).

The results imply that police students perceive the adoption of digital learning according to its effectiveness and ease, plans and criteria for evaluation; and its overall benefits by and large (Muthuprasad et al., 2020).

D. Problems/bottlenecks encountered by the police students with digital learning and their frequencies

When it comes to the issue of connectivity, majority or 56.41% of the police students sometimes have issues in connectivity and 32% reported that problems regarding connectivity happen very often while 7.69% said that this rarely is a problem to them, and 3.4% said that this is certainly always a nuance for them (Table 5).

Connectivity	Frequenc	y Percent	Valid Percent	Cumulative Percent
2	9	7.692	7.692	7.692
3	66	56.410	56.410	64.103
4	38	32.479	32.479	96.581
5	4	3.419	3.419	100.000
Missing	0	0.000		
Total	117	100.000		

Table 5. Frequencies for Connectivity

Consistent with the results of the study conducted by Baticulon et al., (2020) and Rotas & Cahapay (2020) on the barriers to online learning in the time of COVID-19 and the difficulties in remote learning respectively, stable internet connectivity was cited by the police students as one of the major challenges they face when pursuing digital learning. This notion is supported by Aboagye, Yawson, & Appiah (2020) and Amadora (2020) who inferred that poor internet connectivity is commonly a major problem for developing countries with telecommunication systems and ICT, not being properly developed. Evidently, there are several internet bundles and providers available in the country, however, its speed and stability are sometimes fluctuating.

Data Limit	Frequency	Percent	Valid Percent	Cumulative Percent	
1	1	0.855	0.862	0.862	
2	10	8.547	8.621	9.483	
3	48	41.026	41.379	50.862	
4	48	41.026	41.379	92.241	
5	9	7.692	7.759	100.000	
Missing	1	0.855			
Total	117	100.000			

Table 6. Frequencies for Data Limit

Relative to the issue of Data Limit, there is a divide between police students saying that this problem is very often and sometimes the case they encounter with digital learning with 41.026% while 7.69% of them reported that data limit is always a bottleneck for digital learning (Table 6).

Budiman (2020) revealed that the amount of data used, the time of meetings, the number of meetings, and the financial capability of students, influence the data limit or how much internet data is used. As meeting length increases, so does data use, thus, to maintain data capacity, there is a need to increase the data limit to sustain the duration of online classroom instruction.

Data speed	Frequenc	y Percent	Valid Percent	Cumulative Percent
2	5	4.274	4.274	4.274
3	45	38.462	38.462	42.735
4	56	47.863	47.863	90.598
5	11	9.402	9.402	100.000
Missing	0	0.000		
Total	117	100.000		

Table 7. Frequencies for data speed

In terms of data speed, majority or 47.86% of the samples claimed that this is very often the bottleneck they encounter with digital learning, and 38.46% reported that data speed sometimes could hamper digital learning while 9.40% reported that this is always a problem in their digital learning experience (Table 7).

In the study conducted by Mahyoob (2020), it revealed that the first issue reported by the students is internet speed where about 48% of the learners face this problem.

Reportedly, students who have high-speed Internet at home are more likely to engage in educational activities including checking grades, conducting research, submitting homework, looking up information about classes and collaborating with their classmates on projects. In addition, having fast Internet connection at home gives the students the opportunity to collaborate and seek help from their classmates and instructors in new and exciting ways (Hampton et al., 2020).

Little/no face to face interaction	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	0.855	0.870	0.870
2	8	6.838	6.957	7.826
3	48	41.026	41.739	49.565
4	48	41.026	41.739	91.304
5	10	8.547	8.696	100.000
Missing	2	1.709		
Total	117	100.000		

Table 8. Frequencies for Little/no face to face interaction

When it comes to the issue of interaction, there is a divide between police students saying that they encountered this problem very often and sometimes with 41.02% of the police students reported this case as bottlenecks while 8.54% of them reported that interaction is always a bottleneck for digital learning (Table 8).

Planning online learning requires not just modeling the material, but also modeling the many interactions that take place throughout this process. Bernard et al., (2009) discovered that interactions improved learning results, however, one of the primary drawbacks of digital learning is the absence of human connection, both between instructors and students and within the student body. Students' lack of engagement and motivation is linked to the social challenge of human contact between professors and students as well as between students themselves (Ferri, Grifoni, & Guzzo, 2020).

Intense requirement for self- discipline	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	0.855	0.855	0.855
2	6	5.128	5.128	5.983
3	41	35.043	35.043	41.026
4	55	47.009	47.009	88.034
5	14	11.966	11.966	100.000
Missing	0	0.000		
Total	117	100.000		

Table 9. Frequencies for Intense requirement for self-discipline

With their perception on self-discipline, majority or 47% (very often) of the police students agreed that there is an intense requirement for self-discipline when in digital learning (Table 9). This is so since the Regional Training Center 12 intensified its training protocol by strictly imposing

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online netiquettes like turning on video cameras during teleconferences, muting the device when not speaking, zero absenteeism and tardiness policy, on time turn-ins, comprehensive and substantial performance task outputs and many others.

Lack of self-discipline when using digital learning can lead to poor academic performance. Barak, Hussein-Farraj, & Dori (2016) stressed out that one of the personal barriers for learning online is low self-discipline. Reportedly, some oncampus students were concerned about not being able to learn effectively in an online environment because of such. Having given the freedom in the comforts of their home, students will tend to be more lax thus, it is necessary to impose rules and sustain them.

The ability to maintain self-discipline in a virtual modality of instruction has a beneficial influence on academic performance. The results students get at the end of the course are independent of the level of their beginning competency (Gorbunovs, Kapenieks, & Cakula, 2016). With self-discipline, police students can achieve their major objectives.

Instructors' competency	Frequency	Percent	Valid Percent	Cumulative Percent
1	9	7.692	7.692	7.692
2	22	18.803	18.803	26.496
3	48	41.026	41.026	67.521
4	33	28.205	28.205	95.726
5	5	4.274	4.274	100.000
Missing	0	0.000		
Total	117	100.000		

Table 10. Frequencies for instructors' competency

In terms of instructors' competency, majority or 41.02% of the police students claimed that it could sometimes be a bottleneck while 28.20% reported that this is one of the problems or bottlenecks they encountered very often in the adoption of digital learning for their course.

As cited by Coman et al., (2020), teachers need the requisite technological skillsets to manage in such a short period of time and change their teaching style, or correctly engage with students online to ensure high standards of the educational process. Students commonly complain about teachers' lack of technical skills and competencies, and this plays a big part in n decreasing students' motivation. Teachers who lack flexibility or adaptability will struggle to give students with the knowledge they need in an online setting (Suresh, Priya, & Gayathri 2018).

Teachers' technical skills and competencies can be represented by their ability to use various digital learning platform functions to adapt their teaching style to the online environment. For example, using the video conference function allows students to actively participate because teachers can make them moderators of the conference (Coman et al., 2020). These technical skills also include the ability to use screen sharing to present topics, to use

synchronous chat during presentations, to allow students to work in groups and use breakout rooms, to post various links on the platform with references to various sources of information, and the like.

E. Recommendations to effectively integrate digital learning as a mode of instructional delivery for mandatory courses

The integration of digital learning, as part of blended learning modality practiced by the Regional Training Center 12, is generally perceived by many police students (coded as PS) as effective and good. Some informants admitted:

"The digital learning is effective since the course coordinators are hands-on in monitoring and supervising us." -PS 01

"Using the digital learning is, uhhhhm, good because it's new it's appropriate during this time of pandemic. I recommend to the training center to continue the adoption of digital learning."-PS 02

However, to maximize digital learning experience, the police students deemed it important to recommend to the training center management the need to provide free internet connection and free data on the area especially during their stay at the training center when digital learning is still being conducted.

Informant 03 (PS 03) suggested:

"The digital learning in training school is already good but, you know, it needs to improve more in connectivity which will accommodate all learners."

Informant 04 (PS 04) added:

"I suggest having enough wifi connection in the training school to lessen the expenses of the police student. Every classroom must have fix internet connectivity for online classes. Wifi hot spot must be in every corner so that the students could study. The training center can provide net modem in every classroom."

Informant 05 (PS 05) supported the said recommendation by stating:

"For me, if I may suggest, the Training center should have a high speed internet connection so that every student can connect and there's no reason not to comply the requirements given. There should have equipment to be used just like laptop or projector and a high speed internet connection."

The said responses from the police students proved the dire need for the institution to provide free internet connection and access especially when they are inside the training camp for the police students to freely access the supplemental learning materials, to submit their turn-ins, and to interact with their instructors with ease and convenience for digital inclusion and quality education and training to take place (Uy-Tioco, 2019).

Moreover, police students also recommended the need for the institution to invite more instructors who have technical and digital skills.

"Continue to choose effective and efficient instructors with expertise with their subject matter and who know how to manipulate digital learning." -PS 03

Informant 06 (PS 06) added:

"If I may, let me also include, uuhhhmm, the RTC personnel...the RTC 12 personnel should also be trained well in using digital learning so that they can assist us in appropriately."

Informant 07 (PS 07) supported the claim by stating:

"Yes, I agree. We cannot give what we don't have, right? That's why, the PNPTI should continue to give the RTC personnel equal opportunities to develop and equip the personnel with the 21st century digital skill."

In this digital age where teachers/instructors and moderators encourage students to achieve appropriate digital literacy, it is necessary for them to acquire the said digital skillsets too. Teachers' digital abilities and competences should be emphasized as a major element in new learning situations. As cited by Tejedor et al., (2020), when instructors are not prepared for digital learning possibilities, technological investments are insufficient to ensure learning in the near future.

V. Conclusion

Based on the results and findings of the study, the following conclusions were drawn.

- The training center utilizes digital learning platforms like Zoom, Facebook messenger, and Google classroom during the course implementation.
- Digital learning was perceived favorably by police students as providing benefits especially in terms of effectiveness and ease, plans and criteria for evaluation and overall benefits
- 3. There is significantly high correlation or relationship among the effectiveness and ease, plans and criteria for evaluation; and its overall benefits which further implies that police students positively perceived the adoption of digital learning in terms of the given factors.

- 4. Issues on connectivity, data limit, data speed, interaction, intense requirement for self-discipline, and instructors' competency are some of the problems or bottlenecks they encountered while using virtual platforms.
- 5. The police students felt it was important to recommend to the training center management the provision of free internet access and data on the area, particularly during their stay at the training center when digital learning was still being conducted, as well as the invitation of more instructors with technical and digital skills.

VI. Recommendation

Based on the conclusions drawn out from the findings of the study, the following recommendations are derived.

- The training center must highly consider storage capacity upgrading of its Learning Management System so as to increase the volume and capacity of the instructional materials databank for wide and optimized utilization and to sustain and even reinforce the positive results it gains from its implementation. The management should also explore on some other free and friendly digital learning applications to provide digital dynamics and flexibility.
- To increase data/storage capacity, monthly budget must be allocated to ensure sustainability, efficiency, and continuity of digital learning. The institution must earmark fund for digital learning subscription expenditures.
- 3. The institution must heed the call for free internet with strong connectivity for all police students undergoing the training inside the training center. During the face to face classes, instructors sometimes opted to conduct their classes online especially that the cases of pandemic continuous to escalate. The training center must invest in upscaling its internet connectivity within the camp to foster digital maximization and digital inclusion.
- 4. The institution must also strive to upskill its personnel handling digital learning and the instructors who use virtual platforms. To increase their digital literacy, they must be given opportunities to be capacitated by attending to online forums, seminars, and trainings on the use of digital platforms as learning tools.
- 5. The inclusion of trainings attended relative to the effective use of digital learning must be one of the qualifications for instructors' accreditation. Instructors who have not attended such must be given opportunities to participate.

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6. All training personnel and instructors must undergo short courses offered online through Massive Open Online Courses (MOOCs) to support their digital literacy and digital fluency. In the same way, students must be given the opportunities to dive in into the latest global expertise, trends, and technology in learning through free online courses sponsored by World Bank Group, Coursera, EdEx, and many more where they need to complete short online courses with certificate.



Figure 2. The Flexible Learning Management System for Public Safety

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