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Understanding the Educational Experiences and Challenges of College Students in Emilio Aguinaldo College-Manila Engaged in Blended Learning Based Activities

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Abstract — Higher education institutions have been challenged by major changes in their environments because of COVID-19 Pandemic. Today's students grow up with the Internet and digital devices. Therefore, their behaviors differ from those of previous generations. As such, the challenges educational practitioners and designers face are to recognize these differences and to develop educational offerings appropriate for their learning patterns, characteristics, to meet these pandemic challenges.

This study focused on college students' experiences as well as the challenges Emilio Aguinaldo College-Manila has been facing during the implementation of blended learning based activities. The data were generated through documentary reviews and five (5) responses from a questionnaire distributed to students enrolled in college programs. The study has revealed sufficient learning resources, availability of instructors during live online sessions (synchronous), availability of teaching and learning resource areas, and technical difficulties are the main factors that students experienced from excelling well in blended learning activities. These findings have a number of important lessons and implications for similar institutions running blended learning in the country.

I.   Introduction

The recent impact of the COVID-19 Pandemic all over the world has brought tremendous challenges and changes to our educational system. These changes popularized the so called "New normal" in every school, colleges and universities globally. It has decreased the enrollment rate in primary, secondary and tertiary level respectively.

Blended Learning is the "thoughtful integration of classroom face-to-face learning experiences with online learning experiences "(Garrison & Kanuka, 2014, p.96). It aims at combining two delivery modalities: face-to-face, and eLearning in order to provide an effective and efficient learning experience, thereby having the best of both instructional words (Kumar 2012). Such kind of combination helps in catering to different students' learning styles (Ho et al. 2016), increasing learning effectiveness, convenience, and widening access to a growing and diverse student population, for example, those preferring to learn at work, at home or between places with the appropriate technology (Glogowska et al. 2011; Kumar 2012).

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Perceiving these benefits, Emilio Aguinaldo College-Manila started to implement blended learning in 2019 to supplement on-campus course delivery and to comply with CHED continuity learning plan mandates. However, with the advent spread of COVID-19 virus, the Commission on Higher Education as well as the Department of Education announced the transition of face-to-face learning to online learning thus, face-to-face is strictly prohibited in all schools throughout the country.

As of now, despite of the decrease in enrollment due to pandemic, at least 113 students have been enrolled in the college department of Emilio Aguinaldo College - Manila this academic year of 2020-2021. However, the implementation of this blended learning program has resulted mixed and unpredictable results.

When implementing the blended learning course, a question always arises for teachers is how to design learning activities for students to get the best results? Not easy to have a template for every course which applied to the different learning objects. When participating in the blended learning course, students most of the time through the online activities or interacting with the LMS system, so the study results often depend on many different factors.

One factor is the declining of enrollees as prove from the table below. The total number of enrolled students has decline from 257 to 113 in 2017 to 2021 while the percentage ranges from (82%) to (56%) respectively. Table 1 shows enrollment at Emilio Aguinaldo College (EAC) from 2017 to 2021 academic year.

Table 1: College Students' Enrollment at Emilio Aguinaldo College (EAC) since 2017

Academic Year	Applied	Enrolled	% Registered
2017-2018	312	257	82 %
2018-2019	250	193	76 %
2019-2020	213	158	74 %
2020-2021	200	113	56 %

Source: EAC Facts and Figures 2020-2021

The decrease in number of enrolled students per program offering of Emilio Aguinaldo College-Manila as well as the recent implementation of the blended learning based activities have increased the need for Emilio Aguinaldo College-Manila to explore and innovate various delivery mechanisms to widen the access to higher education blended learning program and to achieve a continuity of learning due to the effect of pandemic crisis with education sector.

As a result, Emilio Aguinaldo College (EAC) has been investing heavily in ICTs in order to complement blended learning delivery, and to widen access through Learning Management System (LMS). Naturally, it is not uncommon to find several ICT facilities such as multimedia projectors, interactive white boards, computers, printers, scanners and similar equipment being

part of teaching and learning facilities at Emilio Aguinaldo College. Similarly, several information systems such as student records management systems, eLearning systems, financial information systems, and library information systems has been procured and installed at Emilio Aguinaldo College.

Therefore, the objective of the study was to determine the educational experiences as well as the challenges of college students in Emilio Aguinaldo College – Manila during the implementation of blended learning based activity program.

Research Questions

Studies on the educational experiences and challenges of college students on blended learning program to learning based activity and outcomes showed that many factors are contributor to the results of the student experiences. However, up to now, many studies clearly identify the true manifestation on students' experiences and challenges on blended learning based activity. Besides determining the factors that manifest in the educational experiences of college students toward the blended learning program and in order to fill the gap, the research is conducted to answer the following questions:

1. How do the college students in Emilio Aguinaldo College-Manila describe their experiences with blended learning based activity?

2. What are the challenges and factors that affect the educational experiences of the college students in Emilio Aguinaldo College-Manila?

Literature Review

Due to an abrupt shift in the educational system brought about by the pandemic, there is a need for various teaching techniques and strategies as well as tools to be prototyped rapidly to cope with the paradigm shift. To further look into the significance of the blended learning, an array of substantial articles, topics, and literature was studied by the researcher.

Existing literature review shows blended learning has different definitions and descriptions. However, many of the studies agree that blended learning combines the strength of offline and online learning system to create the most efficient learning environment. The blended environment involves the use of video conferencing, learning management systems, the internet, and other related technologies like social media (Kumar 2012). Therefore, by blending these two forms of delivery (offline and online), one provides an effective and efficient students educational learning experiences; such a combination helps the instructors to use a variety of instructional techniques and achieve effective learning outcomes (Vaughan 2007).

Generally, there is no one formula for blended learning delivery in order to create a certain design (Prezel et al.2019). No two blended learning design are identical (Garrison and Kanuka 2014). The ultimate goal is to apply the "right" Learning technologies; matching the "right" students' learning style and transferring the "right" skills for the "right" students at the "right" time (Liu & Zhao 2010).

Several studies have proposed various blended learning models that can be implemented by institutions of higher education in various contexts. Nonetheless, the models proposed by Graham (2009) stand out in the literature. He proposed three blended learning delivery models:

- Enabling Blends, enables institutions to address issues of access and convenience by using ICTs to provide "equivalent" learning experiences to the traditional face-to-face delivery.

- Enhancing Blends, enables institutions to supplement blended learning delivery with online resources and/or the implementation of online activities via learning management systems.

- The Transforming Blends provides for a significant change in pedagogy that facilitates active learner construction of knowledge.

The choice of the model depends on several factors. Nevertheless, for developing countries like the Philippines where some institutions are still faced with poor ICTs infrastructure, the choice of the model depends on the technologies available to individuals at different bands of the socio-economic spectrum (Graham 2009). Obviously, with learning management systems being used predominantly in higher education in our country, and since all higher institutions were mandated by the Commission on Higher Education to implement the blended learning based program.

Likewise, Emilio Aguinaldo College - Manila has been implementing the Enhancing Blends with eLearning activities via NEO LMS/MS Teams system, and other forms like google meet and zoom.

A Closer Look At The Blended Learning Based At Emilio Aguinaldo College-Manila

The implementation of the Blended Learning at Emilio Aguinaldo College can be traced back to 1985 when Blackboard system was the instructional tools and resources used by Emilio Aguinaldo College (EAC). Initially, Blackboard system was used to complement on-campus face-to-face delivery by enabling students to have access to quality learning resources. In fact, instructors were sharing their course notes with students while the delivery mode remained traditional face-to-face. During this period, faculty and staff members were trained on how to use the computer system.

However, because of the pandemic big change in educational system in the country, the migration to blended learning system was embraced by the education sector.

The Blended Learning Delivery Mode At Emilio Aguinaldo College - Manila Campus

The Emilio Aguinaldo College Blended Learning Delivery combines offline and online delivery with eLearning technologies specifically NEO LMS/MS Teams. All learning resources are uploaded in the system for students to access, and a copy of the same in the form of email given to students. The students enable to access learning resources in an offline environment, or when there is limited internet connection. Furthermore, instructors facilitate course delivery using system tools such as discussion forums, whiteboards, and chat forums. Likewise Zoom. Google Meet is also being used as alternative in case NEO LMS/MST becomes inaccessible so that students would have chance of seeing face-to-face their instructor virtually. Moreover, Emilio Aguinaldo College has provided a learning resource center so that teachers would have an access to computers and internet to those who do not have access in their homes or workplace.

Institutional Arrangement

To enable smooth implementation of blended learning, Emilio Aguinaldo College (EAC) utilized their classrooms as Center for Virtual Learning (CVL) in 2020 to facilitate the development and delivery of blended learning programs both for students and teachers for the conduct of virtual online classes. Teachers conduct online classes at the resource center while students attend classes at home and some in the office. Specifically, the Center:

- Provides pedagogical support to instructors for effective facilitation of blended learning based activities and assessment of learning.

- Develops multimedia enhanced courses as well as packages them into emails for students' access,

- Conducts training for instructors on how to use LMS/MST system,

- Trains subject matter experts on instructional design and online course development principles, and

- Manages LMS/MST system and other software for delivery and development of blended learning courses.

Each room is equipped with a complete set of computer, camera and headset. These facilities include recording, editing and producing video and audio. In addition, technical staff were employed and trained on how to use these equipment and software and assist the instructors for technical problems when online classes are ongoing.

Figure 1: Blended Learning Institutional Arrangement

Since the blended learning program started in 2020, a total of 113 College students have been admitted. Table 2 shows the students' enrolment per program degree.

Table 2: Students Enrollment per Program Degree At Emilio Aguinaldo College-Manila Campus

Enrollment AY 2020-2021	
Programs	**# of Enrolled Students**
AB Communication	12
BS Business Administration	25
BS Computer Science	10
BS Foreign Service	10
BS Hospitality Management	18
BS Information Technology	15
BS Psychology	10
BS Tourism Management	13
Total	**113**

II.   Methodology

This study used the qualitative type of research and using structure interview as open ended type of questions. The questionnaire was created using Google Docs, and emailed to five (5) students who are studying BSBA, BSHM and BSTM and who are currently studying under those blended learning based activity besides reviewing some related documents. A total of five (5) responses were received completed and returned to the researcher. All respondents were guaranteed confidentiality of their individual responses, with the name field treated as optional. Data was collected through Google Docs, and thereafter, downloaded as an Excel file. The data collection was undertaken between second week of May 2021. Statistical Packages for Social Science (SPSS) version 20 was used to analyze the data.

Table 3: Respondents' Demographic Profile

Respondents Profile	Classification	Frequency	Percentage
Gender	Male	2	40.0
	Female	3	60.0
Total		**5**	**100.0**
Type of Program	BSBA	1	20.0
	BSHM	2	40.0
	BSTM	2	40.0
Total		**5**	**100.0**

BLENDED LEARNING STUDENT SURVEY

Excerpt from Interview with 5 College Students-Respondents:

For the researcher and students positive educational experience is an excellent indicator to achieve academic success. Both the researcher and the students believe that student engagement has an important influence on the achievement and learning in higher education.

Data Analysis

The interviews were transcribed instantly and analyzed following the guidelines of thematic analysis (Braun & Clarke, 2016). This analysis was iterative, in which the data was reviewed multiple times, and themes were checked against the collected data in the interviews. The transcribed interviews were summarized and coded, and codes were categorized into five themes: Internet Connectivity and Accessibility, Availability of Learning Resources, Availability of Instructors during Online Class, and Course Content is Organized and Aligned with Course Objectives. Interestingly, students mostly agreed about the needs they had regarding blended learning, but they differed in their experiences regarding the flexibility of the course. The last part of this section explores whether differences in students' performance occurred between the course as a traditional classroom course and a blended course.

CODES and CATEGORIES

CODES	CATEGORIES
ICA	Internet Connectivity & Accessibility
ALR	Availability of Learning Resources
AIOL	Availability of Instructors during online class
CCO	Course Content are Organized

III. Results and Discussion

Students' Experiences and Challenges Faced by EAC during Implementation of Blended Learning Based Activity Program

Learning Resources

The findings indicated that, most of learning resources posted in NOE LMS/MST system were accessible and available for student. This implies that the instructors were updating learning resources once they post them in the system. When respondents were asked to rate if learning resources were regularly updated and references were current and relevant, over 70% of respondents strongly agreed (see Figure 3). The system log revealed that, the majority of courses consisted of learning resources used by previous students.

However, some courses except for the 3 course-respondents (BSBA, BSHM and BSTM) had links that would not open files or play some animations, video clips or audio. When respondents were asked to provide comments regarding learning resources, the majority indicated the need for instructors to update their learning resources regularly (especially before the beginning of every semester). For example, one student said *"...Some courses are not up-to-date. Some pdf files and video clips are not showing or playing. Otherwise it is a good idea but content must be up-to-date"*.
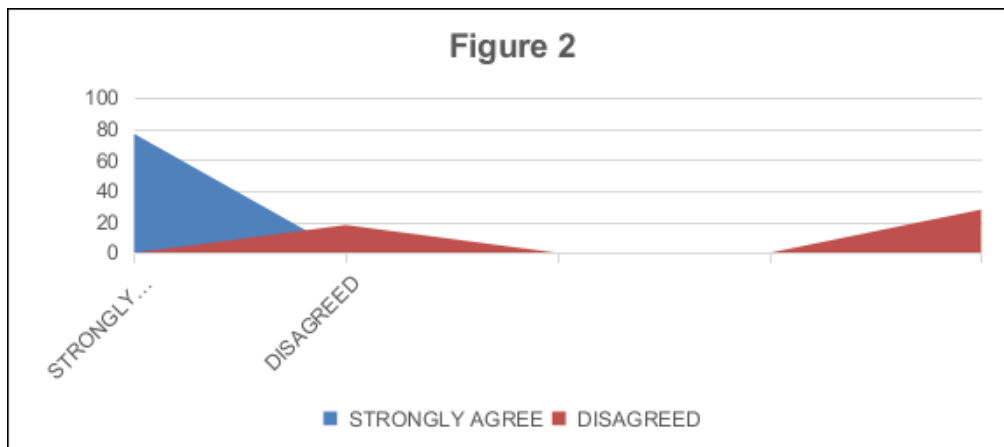

Figure 2: Learning Resources are regularly updated; References are Current and are Based on Regular Literatures

When respondents were asked to rate the appropriateness and sequence of content and learning activities within the course, more than two-thirds of the participants (77%) strongly agreed while only 18% disagreed (see Figure 4). Moreover, when asked if all modules were covered in the course content uploaded in the system, 68% strongly agreed, 23% agreed, and only 9% disagreed.
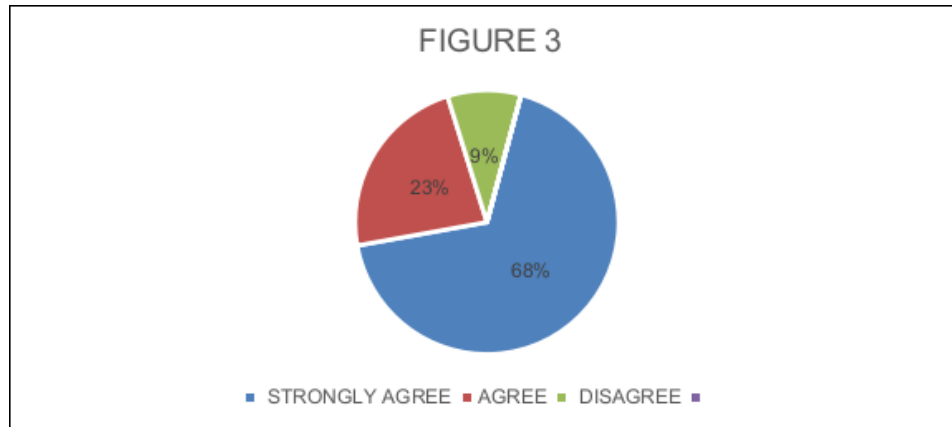
Figure 3: Course Content is Organized Logically throughout the Course

Internet Connectivity and Computer Access

The majority of respondents (80 %) had access to reliable Internet connection as well as access to computers as shown in Figure 4. However, some courses which were integrated with animations, and video clips especially BSCS and BSIT could not play well due to slow internet speeds. The most affected students were those using internet connection in their offices or at home using broadband connection.
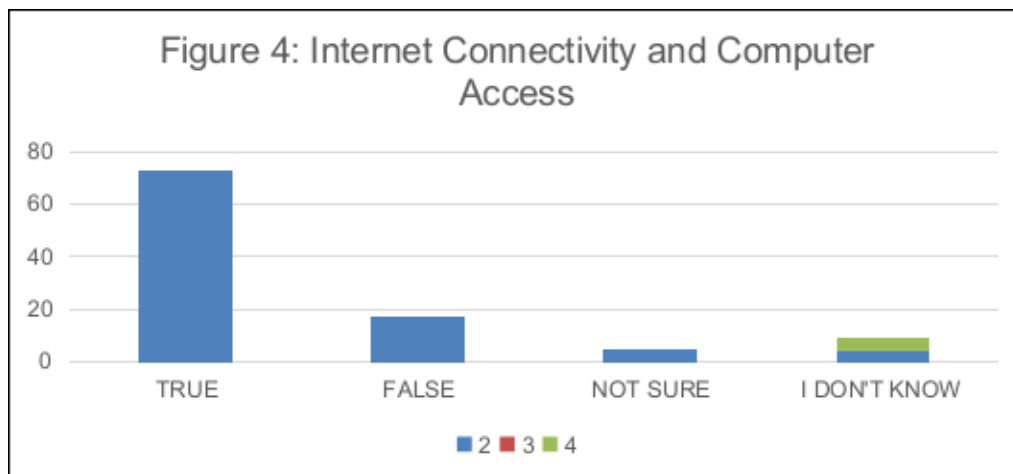

Figure 4: Internet Connectivity and Computer Access

Learning Support

Overall, respondents were positive on the support services provided by Learning Resource Center (LRC) prior and during course delivery. For example, 80 % of the respondents strongly agreed, and 20% agreed that the Learning Centers were equipped with computers connected to fast Internet. Similarly, 80 % of respondents strongly agreed that orientation week was productive and was done effectively, while 20 % agreed.

Majority students were able to access online resources from the library. This has been demonstrated by the fact that, when respondents were asked if there were able to access online resources from the library, 60 % of respondents strongly agreed, while 40 % agreed.

Availability of Instructors in Online Sessions

When the respondents were asked how often instructors appeared in arranged online sessions, majority of respondents said instructors were available in most of live chats. For example, one student said that.. *"Most teachers are available during online classes",* 100 % of the participants agreed that instructors were participating in asynchronous discussion forums, and were providing timely and meaningful feedback.

On the other hand, students suggested that the synchronous sessions be increased from two hours to at least three hours a week. For instance, one respondent suggested that *"...the college should increase time of synchronous in the system"*

The Utilization of LMS/MST Platform

One of the interesting findings was that, almost 98 % of respondents were efficiently utilizing the use of LMS/MST platform in Emilio Aguinaldo College, while only 2 % were using it twice per week for access learning resources. This clearly indicates that the LMS/Platform system was effectively used to access learning resources and other activities.

Technical issues

When participants were asked if they encountered any technical difficulties when participating in blended learning delivery, almost 75% said YES, while 25% said NO. When the students were asked to explain some of the difficulties they were facing, the majority of them ascribed it to inaccessibility of PDF, animations, video clips. For example, one student said "….there are other materials which are not downloaded while you need to download it". Similarly, another student said"... Some pdf files and video clips are not showing or playing".

Moreover, most of course notes, videos clips, and animations were accessible on the platform. 96 % of respondents strongly agreed, and 4% agreed that the platform was effective and most of its courses accessible.

Interpretation and Recommendations

This study aimed to report on students' educational experiences as well as challenges Emilio Aguinaldo College-Manila (EACM) has been facing during implementation of blended learning program. The study has revealed available learning resources, instructors during live online sessions are available, usefulness of Learning Resource Center. However, it was also revealed in the study that technical difficulties were the major factors that affect students from excelling well in blended learning programs. Contrary to expectations, this study found that more than 90% of students had access to platform.

However, it was also revealed in the study that although most instructors are available during online sessions, there are still some instructors that do not update learning resources on time. Generally, there is lack of technical skills in some college instructors with age ranging from 57 to 65 years old in Emilio Aguinaldo College - Manila to develop quality learning resources. As result, instructors and students have continued to rely on printed resources which are expensive to produce, and difficult to share with wider group of learners.

This study recommends instructors be trained to become familiar and competent in technology operability and make use of Open Educational Resources (OER) so as to improve the quality of existing courses through adapting, modifying, and reusing freely available courses contents. Instructors can also acquire skills and competences to develop quality learning resources through participation in OER communities and other free webinars and training.

The study found almost 84% of instructors use Learning Center for accessing learning resources and other activities. This is a clear indication that, internet access in Emilio Aguinaldo College (EAC) has improved significantly.

Another important finding was, students were unable to access multimedia enhanced courses properly due to slow internet connection at home and at work for some working students. It was also revealed that slow internet speed has been the main factor that hinders adoption of technology enhanced learning in the country. Despite the fact that majority of respondents indicated to have access to reliable internet connection to access NEO LMS/MST system, still over one fourth (25%) could not play video clips, or animations properly due to slow internet speeds. Nonetheless, as the government is rolling out DITTO TELCO cable in many parts of the country like in Davao, Mindanao and in Palawan, the internet speed will improve significantly when it comes available in all parts of the country. Therefore, the current accessibility and slow internet speed is a short term problem.

Finally, technical skills of instructors in online live discussions conducted via MST system forums is a major challenge especially in the kind of blended learning environment where there is only two hours a week of synchronous meeting. However, this can also be explained differently. According to Ssekakubo et al. (2011), many instructors in higher education in developing countries

have not been exposed to many ICTs solutions, and therefore their confidence and comfort levels towards using technology is always low.

The findings of this study have brought out a number of important lessons and implications for similar institutions running blended learning based activity program in the country.

Therefore, this study recommends that Emilio Aguinaldo College - Manila provide reliable and effective user support regularly to instructors so that they can use NEO LMS/MST system effectively.

IV.   Conclusion

There are many factors that affect the student learning outcomes in the blended learning course. To find out the specific factors and considering the extent of the student educational experience on blended learning is an intricate problem. This paper conducted to determine the impact of blended learning on student educational experience and learning outcomes. Although Emilio Aguinaldo College - Manila has been implementing blended learning programs for almost two years now, this study found that there are still some challenges that need to be addressed in order to realize the expected benefits. These challenges include technical know- how of instructors during live online sessions as well as on offline sessions for uploading of instructional resources. Another is the technical difficulties which also has a great contribution in students' educational experiences on blended learning based activity. Notwithstanding these limitations, it is becoming increasing difficult to ignore the importance of blended learning program in widening access to, and improving the quality of education in Emilio Aguinaldo College - Manila.

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