

## **MOODLE AND FACEBOOK AS A TOOL FOR DELIVERING INSTRUCTION AND ATTAINMENT OF LEARNING**

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### ***Abstract***

*This study determined the difference between MOODLE and Facebook in delivering instruction and attainment of learning of the students and teachers in LPU-L. Students and teachers with different demographic profile were the respondents of the study to identify their perception of MOODLE and Facebook were measured. The research was done through a survey and interview involving the students and teachers of LPU-L. Based on the findings, download/upload feature is the most used feature in MOODLE while group feature is the most used feature in Facebook. In terms of the overall assessment in the advantages of both tools, system acceptance ranked first in MOODLE while accessibility ranked first in Facebook. There is a significant difference in the extent of the features of both tools. Based on the results, Facebook got the higher weighted mean which shows that it is better to use over MOODLE. The researchers also found out that teachers prefer using MOODLE in delivering instruction while students prefer using Facebook. But if MOODLE will be further developed, then students would prefer MOODLE over Facebook.*

***Key words:*** MOODLE, Facebook, learning, instruction, Internet, tools

## **INTRODUCTION**

As technology advances, the improvement in terms of learning and education is seen. It has evolved from a usual classroom setup where students rely on what is taught by teachers and on what is written on books to a more technologically advance way of acquiring knowledge (Almeda and Orpilla, 2006).

According to Gil (2014), the Internet is named for "interconnection of computer networks". It is a massive hardware combination of millions of personal, business and governmental computers, all connected like roads and highways. It has become another tool to do almost all of the things that were indeed very hard and very time consuming before. Internet has been an integral part of people's lives and has been serving as an important medium for people to interact in the virtual communities through the expansion of information and communication technology (ICTs). Today, there are many online systems that are used to communicate and exchange information, and two of which are Social Networking Sites (SNS) specifically Facebook and MOODLE.

Facebook is a giant SNS by Mark Zuckerberg in 2003. It is considered as the most popular platform for online social networking among college students. The success of it has been phenomenal (Vivian, 2011). Mostly used by students to create Facebook groups intended for their class course or subject to communicate as a whole. MOODLE, on the other hand, is an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). The LMS can be used to conduct courses online or to support face-to-face teaching and learning. It can also be extended with modules for

assignments, quizzes, grading, certification, social and collaborative learning in an engaging manner.

In Lyceum of the Philippines University-Laguna, MOODLE or Modular Object-Oriented Dynamic Learning Environment is commonly used as a learning system. It is introduced by the LPU-L College of Computer Studies on the first semester of School Year 2010-2011. The concept behind this learning management system is that teachers are able to hold online courses by means of posting lectures, quizzes, handouts, topics, announcements and it also provides a facility for electronic submission, and other course-related activities (Dellosa et al., 2012).

The purpose of this study is to analyze the difference between the use of Facebook and MOODLE as a tool for delivering instruction and attainment of learning among LPU-L constituents.

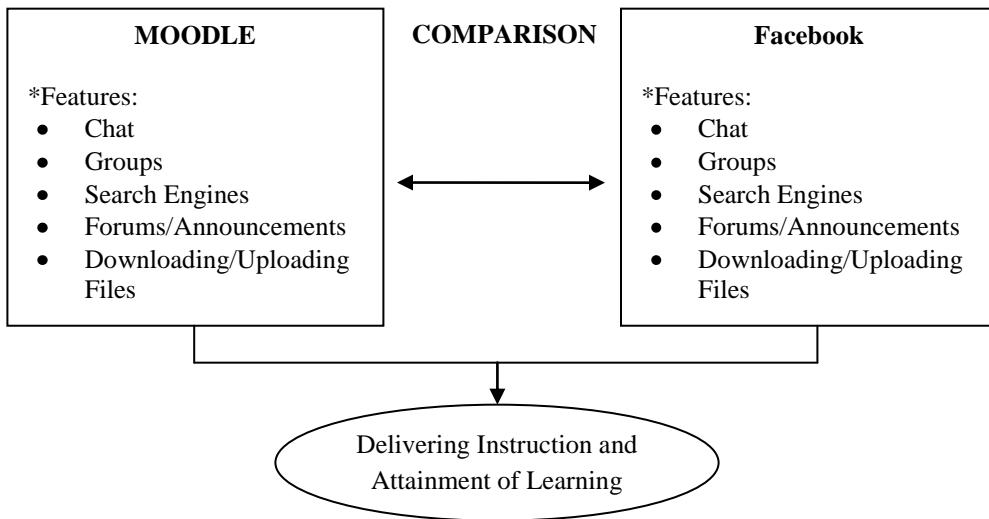
### **Objectives of the Study**

The general reason why the researchers pursued this study is to know the significant difference between Facebook and MOODLE as a tool for delivering instruction and attainment of learning among constituents of LPU-L. Specifically, this study sought to:

1. determine the profile of the respondents in terms of the use of SNS and MOODLE;
2. determine the features of MOODLE and Facebook that are use in delivering lessons to students;
3. determine the extent in which students and teachers use these features of MOODLE and Facebook in delivering instruction;
4. identify the advantages of using MOODLE over Facebook and of using Facebook over MOODLE;
5. find out the significant difference in the extent of the features

between MOODLE and Facebook.

### **Conceptual Framework**



**Figure 1. Conceptual Framework**

The framework of the research shows the comparison between MOODLE and Facebook in terms of its feature which is used as a tool for delivering instruction and attainment of learning.

These common features of MOODLE and Facebook (chat, groups, search engines, announcements and downloading/uploading files) were used to determine which learning system is best used for teacher-students interaction, which will result to teachers having a better delivery of instructions to their students and students having better attainment of learning.

## **METHOD**

The researchers used descriptive type of research. Quantitative-qualitative research is used to analyze the said study. The researchers used the said method through conducting an unstructured interview and a survey to obtain the data needed.

The researchers conducted the study in Makiling, Calamba City, specifically in LPU-L. The respondents of the study were students and teachers in LPU-L. The teachers and students chosen are the ones who use MOODLE and Facebook in their delivery of instruction and attainment of learning.

The researchers used a survey questionnaire which includes a 4-point Likert Scale to determine their perception about the advantages in using MOODLE over Facebook and of Facebook over MOODLE and another 4-point Likert Scale to determine their perception about the features of MOODLE and Facebook that are used in delivering lessons to students. The researchers did a pre-survey to validate the survey questionnaire used. Also, an interview guide was used as a research instrument to obtain the needed data for the study.

The researchers tallied the data obtained and analyzed them through the different statistical methods. Frequency and percentage formula to compute for the demographic profile of the respondents, weighted mean for the assessment of the difference between MOODLE and Facebook and T-test to determine the significant difference between MOODLE and Facebook. On the other hand, the researchers transcribed the data collected from the interviews to get a general idea of the whole.

## **RESULTS AND DISCUSSION**

Results show that most of the respondents have Internet access at home and most of them prefer SNS compared to MOODLE. Based on the results, out of all the SNS used nowadays, almost all of the students prefer using Facebook as a tool for learning. Timeline wherein the respondents started using MOODLE and SNS is also shown. Most of the respondents started using MOODLE last year which means that some of the students have been using MOODLE even before they entered LPU-L. On the other hand, most of the respondents started using SNS as a learning tool 3 years ago which shows that most of the respondents are more exposed in using SNS than MOODLE since they have been using SNS for quite a long time. The respondents mostly use MOODLE twice a week while they use Facebook on a daily basis which shows that most of the respondents frequently use Facebook more than MOODLE. The length of time in using MOODLE and Facebook is also shown. Most of the respondents have been using MOODLE for about 1-2 years while most of the respondents have been using Facebook for more than 4 years which means that the length of time of the respondents in using Facebook is longer than in MOODLE. Based on the result on the common feature of MOODLE and Facebook, most of the respondents use the downloading and uploading of files in MOODLE while the group feature is the most used feature in Facebook. This only means that this feature is what they usually use whenever they use MOODLE and Facebook.

### **Advantages in using MOODLE over Facebook and of Facebook over MOODLE**

The study also included the advantages of both tools over the other in terms of the following categories. According to students, in terms of usefulness, it shows that MOODLE is more useful in terms of saving time and money, while Facebook is better in terms of using it comfortably. Both

tool got the lowest weighted mean in terms of being flexible and meeting the different needs of the respondents. In terms of accessibility, the respondents' comprehension to MOODLE and Facebook is similar, and one can easily become skillful with Facebook unlike with MOODLE. It also shows that the students could not access MOODLE and Facebook all the time. Based on the results, in terms of system acceptance, MOODLE is better over Facebook in terms of storing knowledge while Facebook is better over MOODLE in terms of making use of the information learned during the lesson, and unlike MOODLE, students agreed that Facebook will be continuously used in learning. In terms of function, MOODLE is better to use over Facebook in sharing sources in any format while Facebook is better to use in online discussions than MOODLE.

On the other hand, according to the teachers, in terms of usefulness MOODLE is more flexible and it can provide their different needs than Facebook. On the other hand, Facebook is more user friendly than MOODLE. The results show that in terms of accessibility, MOODLE is better than Facebook since teachers *strongly agreed* in all areas of its accessibility. While Facebook is also accessible but it has to improve in terms of being accessed anytime and being used skillfully. According to the teachers, in terms of system acceptance, MOODLE and Facebook are equally good to use in terms of acquiring and storing knowledge. MOODLE is better in providing a good learning strategy than Facebook. Based on the results, both MOODLE and Facebook are the same in terms of function according to teachers.

### **Overall Assessment in terms of Categories**

The overall assessment of the students in the advantage of MOODLE over Facebook is its system acceptance while accessibility got the lowest mean. This only shows that MOODLE has greater advantage in terms

of its benefits on delivering instruction and attainment of learning over Facebook. In contrast with MOODLE, Facebook's accessibility got the highest weighted mean and its function got the lowest weighted mean which only means that Facebook can be used wherever and in any way one wants to use it.

**Table 1. Overall assessment on the categories of MOODLE and Facebook according to students**

MOODLE			Facebook		
Categories	Mean	Verbal Interpretation	Categories	Mean	Verbal Interpretation
System Acceptance	3.14	Agree	Accessibility	3.53	Strongly Agree
Function	3.05	Agree	Usefulness	3.45	Agree
Usefulness	2.98	Agree	System Acceptance	3.42	Agree
Accessibility	2.96	Agree	Function	3.40	Agree
AVERAGE	<b>3.0325</b>	<b>Agree</b>	<b>AVERAGE</b>	<b>3.45</b>	<b>Agree</b>

On the other hand, most of the teachers agreed that MOODLE's system acceptance is better, while in Facebook, they *strongly agreed* that it is very accessible in contrast with MOODLE. This only shows that teachers, similar to students, benefit in using MOODLE in their delivery of instruction. In terms of Facebook, they are also similar to their students in a way that they can access it anywhere and can use it in whatever way they want.

**Table 2. Overall assessment on the categories of MOODLE and Facebook according to teachers**

MOODLE			Facebook		
Categories	Mean	Verbal Interpretation	Categories	Mean	Verbal Interpretation
System Acceptance	3.15	Agree	Accessibility	3.55	Strongly Agree
Function	3.05	Agree	Usefulness	3.46	Agree
Usefulness	2.98	Agree	Function	3.44	Agree
Accessibility	2.95	Agree	System Acceptance	3.42	Agree
AVERAGE	<b>3.0325</b>	<b>Agree</b>	<b>AVERAGE</b>	<b>3.4675</b>	<b>Agree</b>

## **Common features of Facebook and MOODLE**

Included in the study is the perception of students on the common features of MOODLE and Facebook. Based on the results, MOODLE's chat feature is better in limiting group members or roles or be for anyone while Facebook's chat feature is better in supporting URLs, address, images, and others. In terms of group feature of Facebook and MOODLE are equally good to use in terms of being able to email posts in many different ways, it is just that Facebook has a higher weighted mean. MOODLE's search engine is better than Facebook's in terms of being flexible and case sensitive while being fast and sorting results by relevance is better in Facebook's search engine than in MOODLE's. In the feature forum/announcements, both MOODLE and Facebook are equally good to use in terms of making attachments to posts and showing it as a part of the message. In terms of downloading and uploading feature, both MOODLE and Facebook are similar and good to use in submitting and uploading files and Facebook is better than MOODLE in terms of accessing the uploaded and downloaded files.

On the other hand, the perception of teachers on the common features of MOODLE and Facebook is that both are similar in terms of allowing smooth, synchronous text interaction, viewing all logged sessions and being limited to group members or roles, or be for anyone while Facebook is better than MOODLE in terms of supporting URLs, address, images etc. While MOODLE's group feature is better to use than Facebook's group feature based on the teacher's perception of using both tools. This means that Facebook has to improve in all areas of its group feature including choosing not to allow replies to their posts, providing options for more entry and viewing limitations, and being able to email posts in several ways. According to the teachers, both MOODLE and Facebook are good to use in terms of its search engine and only needs to improve on one aspect

which is being able to deal with different language content. In terms of forum/announcements feature, both are good to use in making attachment into posts and showing it as a part of the message but needs to improve on other areas. MOODLE is better to use in all areas of its download and upload feature while Facebook needs to improve in providing easy way to present materials to students. But other than that, its download and upload feature is also good to use.

The data showed that the result of T-test is below 0.5 which means that there is a significant difference in all of the common features and all of the categories of both MOODLE and Facebook. However, the researchers found out that the result in all paired sample test is that Facebook has a higher weighted mean over MOODLE which means that it is better to use over MOODLE.

### **Overall assessment in terms of features**

Students agreed that the downloading and uploading files feature of MOODLE is good to use while only a few agreed to its chat feature. On the other hand, they *strongly agreed* that Facebook's chat and downloading and uploading of files feature is good to use while few *agreed* to its group feature. This shows that the students *agreed* that the downloading and uploading file of both Facebook and MOODLE are equally good to use while the chat feature of Facebook is better to use than the chat feature in MOODLE.

**Table 3. Overall assessment on the features of MOODLE and Facebook according to students**

MOODLE			Facebook		
Categories	Mean	Verbal Interpretation	Categories	Mean	Verbal Interpretation
Download/Upload System	3.31	Agree	Download/Upload System	3.52	Strongly Agree
Forums	3.12	Agree	Chat	3.52	Strongly Agree
Groups	3.07	Agree	Forums	3.51	Strongly Agree
Chat	2.95	Agree	Search Engine	3.46	Agree
Search Engines	2.85	Agree	Groups	3.42	Agree
<b>AVERAGE</b>	<b>3.06</b>	<b>Agree</b>	<b>AVERAGE</b>	<b>3.486</b>	<b>Agree</b>

As for the overall assessment of the teacher, it is similar to the perception of students, they *agreed* to its downloading and uploading of files feature in MOODLE, while they *strongly agreed* to the chat feature of Facebook. This means that the teachers' assessment is similar to their students in which downloading and uploading file in MOODLE is better to use than in Facebook while chat feature is better to use in Facebook than in MOODLE.

**Table 4. Overall assessment on the features of MOODLE and Facebook according to teachers**

MOODLE			Facebook		
Categories	Mean	Verbal Interpretation	Categories	Mean	Verbal Interpretation
Download/Upload System	3.31	Agree	Download/Upload System	3.54	Strongly Agree
Forums	3.13	Agree	Chat	3.52	Strongly Agree
Groups	2.98	Agree	Forums	3.51	Agree
Chat	2.95	Agree	Search Engine	3.46	Agree
Search Engines	2.84	Agree	Groups	3.42	Agree
<b>AVERAGE</b>	<b>3.042</b>	<b>Agree</b>	<b>AVERAGE</b>	<b>3.492</b>	<b>Agree</b>

## CONCLUSION AND RECOMMENDATION

### **Conclusions**

As the researchers found out the demographic profile of the respondents, they also found out that some of the demographics (age, gender, and use of SNS and MOODLE) did influence their perception with attainment of learning and delivering instruction using MOODLE and SNS in their class. Age became a factor in the students' coping in online learning in LPU-L. The researchers found out that there is significant difference in the perception of the students and teachers as they were grouped according to age and their use of SNS and MOODLE. Whether male or female, both are active in using and browsing the Internet, also most of the respondents have Internet access at home so they are both exposed to Facebook and MOODLE, thus, gender does not affect their perception in using Facebook and MOODLE.

The respondents used different common features of Facebook and MOODLE to cope with the online learning. The common features that both tools have like chat, groups, forums, download and upload system and search engine has the same function and are very helpful to both students and teachers. The results show that students use the download and upload feature of MOODLE the most while they use the group feature the most in Facebook. Also, according to the overall assessment of students, most of them *agreed* on the downloading and uploading system of MOODLE while they *strongly agreed* on the chat feature and downloading and uploading system on Facebook. On the other hand, teachers *agreed* on the downloading and uploading feature of both tools. In terms of feature, both MOODLE and Facebook are helpful in acquiring knowledge and delivering instruction.

The respondents' perception on the advantages of MOODLE over Facebook and of Facebook over MOODLE was that both tools benefit the respondents in terms of its usefulness, accessibility, system acceptance and functions. Both teachers and students *agreed* on the system acceptance category of MOODLE. Also, they *agreed* on the accessibility category of Facebook according to their overall assessment on both tools.

In terms of the extent of the features between MOODLE and Facebook, the researchers found out that there is a significant difference between the uses of both tools, which means that although both are helpful to the respondents there is still a contrast between its common features.

Based on the interviews, students had different opinions and experiences in using MOODLE and Facebook. Almost all were required by their professors to use MOODLE. Students complained mostly about how slow the MOODLE system was unlike Facebook which is much accessible and fast. But most of them said that if MOODLE will be developed and improved, they would prefer to use it. However, teachers also have the same concern about MOODLE but still prefer MOODLE as a tool for online learning.

Having MOODLE and Facebook is an advantage to the students and teachers because they can extend their classroom learning wherever they are and it makes their work easier.

### **Recommendations**

Based on the conclusion of this study, the researchers recommended the following:

For the students, the researchers recommend to continue using Facebook and MOODLE as a tool in attainment of learning because it was both efficient and effective according to the results of this study.

For the teachers, the researchers suggest to remain using Facebook and MOODLE as a tool for delivering instruction to their students and enhance it by orienting their students more on how to use Facebook and MOODLE for the attainment of learning.

For the institution, researchers suggest to further familiarize the use of Facebook and MOODLE and require an orientation about MOODLE not only for the teachers but more importantly for the students. As the research found out, MOODLE is preferred by the students only if it will be further developed and improved, so the researchers recommend that they make a move in enhancing and developing MOODLE in order to be the main tool for distributing instruction and attainment of learning.

For future researchers, the researchers recommend the further development and enhancement of this study whenever future researchers would want to conduct a study on this matter.

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