

# Application of Web-Based Learning Information Systems Case Study SMPN 3 PPU

*Tri Al Ansori*<sup>1</sup>, *Fajar Fina Alawiyah*<sup>2</sup>, *Joy Nashar Utamajaya, S.Kom, M.M.S.I*<sup>3</sup>

<sup>1</sup>*Student, Information System, STMIK BORNEO INTERNATIONAL, Jl. AW. Syahrani, Batu Ampar Kec. North Balikpapan, Balikpapan City, East Kalimantan.*

<sup>2</sup>*Lecturer, STMIK BORNEO INTERNATIONAL, Jl. AW. Syahrani, Batu Ampar Kec. North Balikpapan, Balikpapan City, East Kalimantan.*

*Corresponding Author: Tri-al\_ansori.18@stmik-borneo.ac.id*

**Abstract:** - SMP Negeri 3 PPU is one of the educational institutions whose activities provide accurate, fast, relevant and complete information. This study aims to develop a web system in the form of website-based learning. An information system is a collection of elements that interact with each other to achieve certain goals, namely processing data into a form that is more meaningful and useful for the recipient and is useful for current or future decision making. With the learning web at SMP Negeri 3 Penajam Paser Utara, it can help teachers in carrying out a lesson. The web is a collection of documents that are widely spread over several server computers located in all corners of the world and are connected into a single network through a network called the internet.

**Key Words:** —*SMPN 3 PPU, Information System.*

## I. INTRODUCTION

Web-based learning is a learning that can be accessed via the internet. Web-based learning which is popularly known as web-based training (WBT) or sometimes also called Web Based Education (WBE) can be defined as the application of web technology in the world of learning for an educational process. The development of technology at this time is very fast and advanced, one of which is a computer, at this time almost all fields need the internet as a source of information and telecommunications that is fast and efficient so that the use of the internet today has become a very important requirement for all levels of society. Web-based learning is a teaching and learning process that is carried out by utilizing the internet network, so it is often referred to as e-learning. Thus, the use of the internet in the field of information systems provides enormous benefits such as the presentation of the information needed can be obtained quickly, accurately and completely without having to go through a difficult information search process.

An information system can be defined as a collection of elements that interact with each other to achieve certain goals, namely processing data into a form that is more meaningful and useful for the recipient and is useful for current or future decision making. Regarding the understanding of the meaning of this information system, in his book Abdul Kadir (2003:11) cites several expert opinions, including: According to Hall, an information system is a series of formal procedures in which data is grouped, processed into information and distributed to users. According to Alter, an information system is a combination of work procedures, information, people, and information technology organized to achieve goals within an organization. From the three definitions above, it can be concluded that what is meant by an information system does not have to involve a computer in the process of processing data into information. Information systems that involve computers are usually called computer-based information systems (CBIS). However, in general the word information system is defined as a computer-based information system, although the word computer-based is not added.

### 1.1 Formulation of the problem

After identifying the problems that exist in the information system at SMP Negeri 3 PPU, the authors found several formulations of the problems that occurred, namely:

- How to design a learning information system in SMP Negeri 3 PPU
- How is the learning information system currently running at SMP Negeri 3 PPU

**II. RESEARCH AIMS AND OBJECTIVES**

**2.1 Research Purpose**

The purpose of this research is to develop a learning information system for the benefit of students and teachers who are better and to streamline and streamline the handling of information.

**2.2 Research purposes**

While the objectives of this research are:

- To find out the implementation of the learning information system in SMP Negeri 3 PPU
- In order to know the learning information system that runs at SMP Negeri 3 PPU

**2.3 Research Methods**

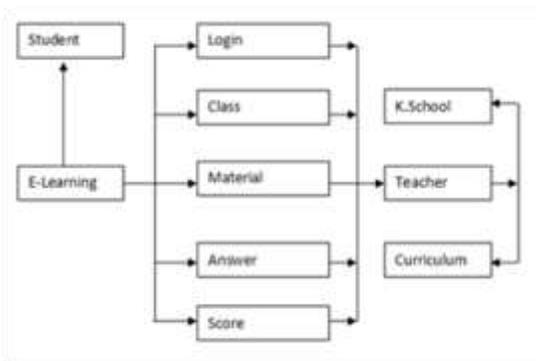
The research method used is a qualitative method which aims to analyze a learning information system at SMP Negeri 3 Penajam Paser Utara.

**III. RESULTS AND DISCUSSION**

**3.1 System Analysis When Running**

The modeling process here is to describe the form or what will happen between the actors and the use case in the running system. The process or what is currently running is described through a use case diagram first through a use case. where the system is running.

The ongoing evaluation of the system is as follows:



**3.2 System planning**

This design, functioned as an access flow connection model between users to the Web server. The process starts from client access by browsing to the web server, then the request from the user/client is sent to the database server. After that the server answers / responds immediately to requests from the client by the web server earlier. after receiving a response from the database server containing the content/information contained in the database, then the web server immediately answers/responds to the request from the user/client earlier. For the system workflow, it is the same as in the intermediate workflow design

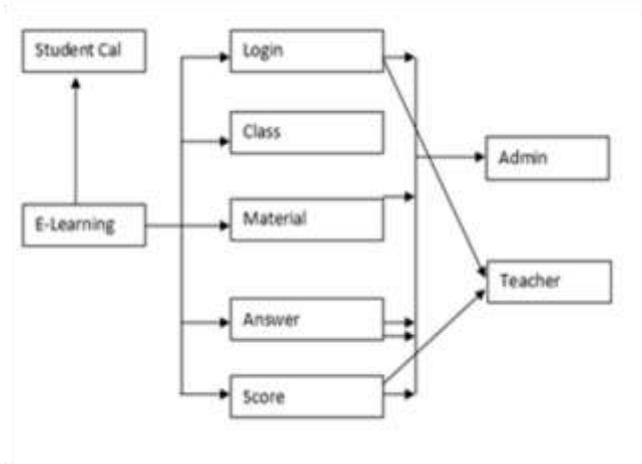
No	Problem	Solution
1.	Still lack of information about school to the wider community	Creating a website for SMP Negeri 3 Babulu
2.	There are still problems with the online learning process	Creating a distance learning information system
3.	Lack of information about the student's lesson schedule at school to parents	Creating an online scheduling information system
4.	Lack of information to parents about student learning outcomes services at school.	Creating an online value information system

User to the server, it's just that this design is more detailed, and visualizes who uses this investment system and who plays a role in running the system. In practice, actors who access the website:

By typing the URL / website address of the School Information System at SMP Negeri 3 PPU, by typing (eg: <http://www.smpn3ppu.sch.id>).

Then the URL that was addressed earlier, enter the Academic Information System website of SMP Negeri 3 PPU which is connected to the server, as well as the Admin, but what is different is that this Admin has free access to the Academic Information System website and each of them has a username and password for access the system. This is in order to maintain the security of the system that is running.

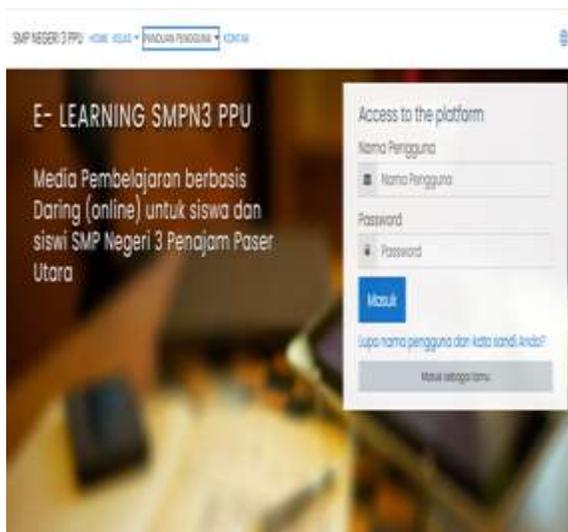
*use case* The diagram describes the expected functionality of a system. The emphasis is on "what" the system does, and not "how". A Usecase represents an interaction between the actor and the system. Here is the use case design:



The picture above is a Usecase Diagram of the School Information System at SMP Negeri 03 PPU. The Usecase Diagram illustrates where the Admin is required to "Login" first to process investment activities and others. Likewise with teachers who have to do the login process in order to be able to carry out the academic process, namely inputting the grades of the students being taught.

### 3.3 Implementation

This main form appears as the first display of the website. In the menu there is a Student login and Password (for teacher and student access).



## IV. CONCLUSION

Based on the results of the study, it can be concluded that a web-based learning information system can help teachers and students in their teaching and learning activities because this learning system allows both parties to continue teaching and learning activities outside school hours, assisting teachers in informing grades, assisting teachers in making it easier to give practice assignments, as well as assisting students in deepening the material. With this system, teachers will also be helped in terms of giving grades, and students will see their values.

### Suggestion:

Always monitor system performance, if the content system is no longer able to provide the desired benefits in supporting teaching and learning activities, it is necessary to redesign by subsequent researchers according to the level of needs of SMPN 3 PPU Schools.

## REFERENCES

- [1]. Dimiyati and Mudjiono. (2006). Learning and Learning. Jakarta: Ri Neka Cipta.
- [2]. Djamarah, S and Zain, A., (2002). Teaching and Learning Strategy. Jakarta: Earth Script.
- [3]. Firat, M and Kuzu, A (2011) Semantic Web For E-learning bottlenecks: Disorientation and Cognitive Overload International Journal of Web & Semantic Technology (IJWeST) Vol.2, No.4, October 2011.
- [4]. Lawanto, O (2000). Web-based learning as a complementary method education and training activities, Journal of Educational Research 1 September 2000 - February 2001, 44-58.
- [5]. Maryati. (2007). the Role of Educators in the Teaching and Learning Process Development of e Learning. Jurdiknas Training. Sukabumi.
- [6]. Sagala, S. (2005). The Concept and Meaning of Learning. Bandung: Alfabeta.
- [7]. Heinich, R, Molenda, M, and Russell, JD., (2002), Instructional Media and the New Technologies of instruction. (3rd ed), MacMillan Publishing Company: New York.