

E-learning in the Department of Library Science of UIN Alauddin Makassar Based on Claroline

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UIN Alauddin Makassar

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Abstract

Background of the study: Since established in 1999, the Department of Library Science of Universitas Islam Negeri (UIN) Alauddin Makassar has been teaching its degree students throughout conventional way of teaching, in which whiteboards and classrooms are still mostly used as learning media till current days. The department challenges with the growing education technology, media such as e-learning.

Purpose: This paper is aimed to describe the strategic planning to build and implement an e-learning in the department and to configure e-learning software called Claroline.

Method: The data were gathered by discussing with all lecturers and several students as the basic sources to plan and build e-learning.

Findings: As the research findings, Panrita 4.0 was determined as its e-learning's name in order to make the engaged users (lecturers and students) be more familiar with.

Conclusion: In addition, the study highlighted challenges faced by most lecturers in implementing such learning media although trainings have been conducted. However, most students were more enjoy learning with Panrita 4.0, even though it was their first experience dealing with such media.

Keywords: *Learning Management System, Claroline.*

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Introduction

The presence of technology in Indonesia had initially touched in several sectors such as trade, industry, military, banking, mass media, and also in government. It was not exactly known when the technology in the Nation had approached education sectors, but it can be ascertained that the technology in education current days is increasingly sophisticated and growing rapidly. The establishment of facilities and infrastructures accompanied by supporting government policies also implies making education in the country even better.

It has become a common view in the developing countries, where teachers and students face each other in a traditional classroom. This kind of learning interaction is still common, and it looks like it will continue like that. However, especially in higher institutions/universities, the delivery of learning materials has changed by offering a variety of forms of distance learning or online education that are packaged in the form of an electronic learning (e-learning). The distance between educators and students seems to be not limited by space and time, classrooms are no longer the only media to interact because of the development of information and communication technology (ICT) today, and also access to information is much easier to obtain.

Thanks to the advanced technology today, it has helped higher education institutions to deliver its services. Hardware and software were established to support teaching and learning processes. For example, the presence of the institution's repository or digital library in many institutions has contributed to improve information literacy (Munawaroh, 2018). Meanwhile, internet networks in each part, throughout Indonesia are different, but the development in many sectors is still being carried out by the current government and other private companies. This, of course, can have a big impact on the sectors of life, including education.

In terms of distance learning in Indonesia, known as Pendidikan Jarak Jauh (PJJ) or Long-Distance Education has been regulated in the current government policy (Anon, 2016). "Long-Distance Education (PJJ) is a 21st century innovation, an education system that has a wide range of space, time, and socio-economic coverage. The PJJ system provides access to education to anyone, anywhere, and at any time (Kemahasiswaan, 2011)." This government policy certainly opens up great opportunities for anyone in Indonesia to touch with education equally.

The Department of Library Science of Universitas Islam Negeri Alauddin is one of departments in the university that established in 1999. Currently, lecturers deliver their course learning materials through the conventional way of teaching. Till few years ago, e-learning has approached certain lecturers. Since, many courses in the field are related to the development and role of ICT in the current days, it is therefore the department have to improve the capacity of the material and the learning process by trying to implement e-learning. In other words lecturers must develop skills in implementing e-learning.

In terms of increasing skills in technology, learn through e-learning is an important issue at the department. Even though some lecturers have tried such as Google Classroom, Moodle, Edmodo, or maybe some other e-learning tools, but the implementation has failed due to certain things, or even have not matched with the intended goals. Therefore, the objectives of this study are; to describe the strategic planning to build and implement e-learning at the Department of Library Science of UIN Alauddin Makassar based on Claroline (an open source e-learning software); and to configure certain things in its software.

E-Learning: a Brief Review and Previous Studies

For more than half a century the concept of e-learning was first discussed and applied. At the time, the countries that had very rapid advances in science and technology, such as USA, UK, France, and other western countries had begun implementing electronic-based learning. E-learning was initially defined as "a new model in the learning process, namely conventional learning that is poured in digital format through technology" (Hendrastomo, 2007). The time moves, the definition also is redefined, an e-learning is not only able to power conventional in digital form, but more than that, it can improve the

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quality of learning processes and results.

Some authors defined differently the concept of an e-learning. This can be seen from the research conducted by Arkorful and Abaidoo (2015). However, according to these two researchers, the definitions vary and have their own characteristics. According to Holmes and Gardner in (Arkorful & Abaidoo, 2015), “there may be as many definitions of the term e-learning as there are academic papers on the subject.” Goyal (2012) defines as “e-learning can be defined as technology-based learning in which learning materials are delivered electronically to remote learners via a computer network.”

E-learning is increasing and more widely used in Indonesia, whether at the high school level or equivalent, till higher educations. In universities themselves, more specifically in universities that have distance education programs, e-learning has become an adequate, efficient, and effective learning tool, especially supported by the development of infrastructures and human resources that are increasingly day by day.

Researches related to other e-learning are carried out by Hendrastomo (2007), Agustina (2013), Adawi (2011). In terms of utilization, quality standards and effectiveness of e-learning so that increased motivation between teaching staff and participants at the school level was measured by Hanum (2013) and Kosasi (2015). The e-learning concept offers at an adequate high school level, such as a case study studied by Sutanta in (2016), and e-learning as a preparation for the National examinations conducted by Nyimas Sriwihajriyah, Endang Lestari Ruskan (2012).

Meanwhile, several universities in Indonesia have implemented e-learning, whether it is used for remote classes that they have or for the campus itself. Several studies have measured e-learning in the higher educations, for instance, Supradono (2009) resulted two design methods for developing e-learning in universities, namely in terms of governance and development management. The method of developing e-learning in universities is also formulated by Yazdi (2012), Supriyanta (2013), Sutomo (2007). The beginning of a significant change in the learning method with the presence of e-learning at colleges in Indonesia was reviewed by Tri Darmayanti, Made Yudhi Setiani (2007). There is also one study that provides a holistic concept that can be used and developed towards the application of e-learning in Islamic universities (Kusumaputri, 2011).

While researching on e-learning from abroad are indeed very relevant to the application of e-learning in the library science department, among others are measured by Abubakar and Hassan (2013). The study examined the very basic needs of the application of e-learning in every library and information science curriculum. In addition, this study also emphasized that library and information science majors in Muslim countries must accept and adopt e-learning that currently exists. The similar research conducted by (Abubakar, 2014) in Nigeria. According to him, there was a need to review the application of e-learning in each library science department in Nigeria. Other related researches to e-learning in the field of library science are conducted by Kumbhar (2009), Tripathi and Jeevan (2010), Kumar, Sharma, and Joshi (2010), Islam (2009). There is also a result of exposure reported by Virkus (2012).

The learning process in the field of library and information science, as with other fields of science that have applied e-learning in the teaching and learning process also needs to follow the same thing, especially with the many service fields in the library that emphasize the use of up-to-date information media technology. Of course with this application, will not only influence the learning process, but it will also affect technological knowledge for all prospective library science graduates.

Research Method

The strategy planning used to implement e-learning in the Department of Library Science of UIN Alauddin Makassar has adopted the Lewis and Whitlock’s framework for developing e-learning programs (Abubakar & Hassan, 2013), as shown in the figure 1. The initial stage shows that;

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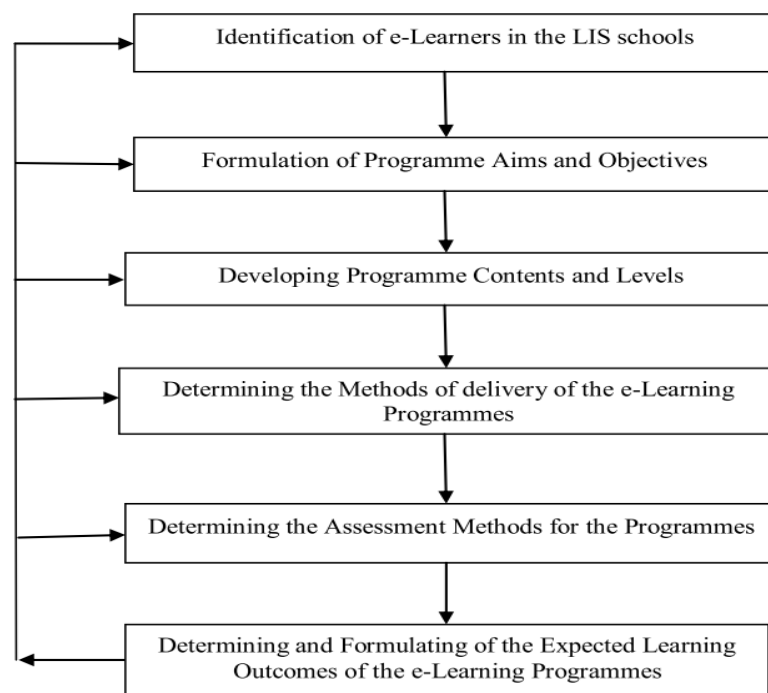


Figure 1: Lewis and Whitlock's theoretical framework adopted by Abubakar and Hasan (2013)

The researchers first choose the software that will be used as e-learning in the department. As a decision, the open source learning management software system, called Claroline was chosen. It was then installed and configured on the campus server. The installation process in the server is quite easy while the configuration was adjusted based on the needs of its users later; both lecturers and students. The configuration itself has spent several days and until now it is still being adjusted. During the configuration, the strategic planning mentioned above is applied and it has been taken several months to engage with all stages. As reinforcement, the results of discussions with several lecturers and students also become an important data in this study. It is to ensure, the e-learning might benefit for the department.

Results and Discussion

Stage 1: Identification of E-learners

The first step, researchers have identified that there were currently 684 active students at the Department of Library Science of UIN Alauddin Makassar. In terms of e-learning, there was already a couple of e-learning training programs attended by few lecturers in the department. However, there was only a lecturer had implemented e-learning provided by the university. Meanwhile, for the students, most of them have never experienced in interacting with e-learning before. From this initial stage, this research is interested in designing and set e-learning in the department.

The researchers have chosen Claroline as the e-learning software due to it was an open source, easy to understand and to configure, the researchers' experiences in dealing with the software. In 2018, the software was installed within the university's server and now appears on the <http://elearninglis.uin-alauddin.ac.id/>. At the initial stage, to be more familiar with, the researchers have determined a name called 'Panrita 4.0', putting it in the e-learning website header so that the engaged users and people might easily recognize it and familiar with. The word '*Panrita*' itself comes from the local language, which means "knowing/smart/brave", while the numbers '4.0' refers to the Industrial Revolution 4.0 that is now experienced by people today, in which each phase of life connects with technology. Figure 2 displays the Panrita 4.0 e-learning's homepage.

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Figure 2: Panrita 4.0 e-learning at the Department of Library Science UIN Alauddin Makassar used Claroline (<http://elearninglis.uin-alauddin.ac.id/>)

Stage 2: Formulation of Program Aims and Objectives

Thanks to the advanced technology in current days. The second step, Panrita 4.0 has been socialized through social media such as Facebook and WhatsApp, and the department website since it was first time launched, to ensure that lecturers and students might quickly know and familiar with this e-learning. The main purpose of making e-learning has also determined as short and simple as possible and it has been uploaded on YouTube and displayed on the Panrita 4.0's homepage.

Stage 3: Developing Program Contents and Level

Learning designers are always tempted to provide reinforcement on the content (Lewis & Whitlock, 2003). Currently, there are 39 main courses offered by the department and all of them were added and listed in the Panrita 4.0 e-learning. Although all of these courses have been appearing on the site, but the contents and level are still in progress to develop.

The screenshot shows the 'COURSE LIST' page in the Panrita 4.0 e-learning platform. The page includes a navigation bar with 'My desktop', 'My messages', and 'Platform administration'. Below the navigation bar, there is a 'COURSE LIST' section with a 'Create course' button. The course list is displayed in a table with columns for 'Code', 'Course title', 'Course members', 'Course settings', and 'Delete'. The table contains 8 rows of course information.

Code	Course title	Course members	Course settings	Delete
IP13342	Analisis dan Desain Sistem Informasi (AP3-4)	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP13343	Promosi Jasa Perpustakaan & Informasi	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP13346	Sistem Jaringan Informasi	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP13347	Manajemen Arsip	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP14243	Grafika & Penerbitan	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP14324	Perpustakaan Digital	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP14345	Otomasi Perpustakaan	1 member(s) 1 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖
IP10255	Manajemen Perpustakaan Perguruan Tinggi	2 member(s) 2 course(s) manager(s) - 0 student(s)	⌵ ⌶ ⌷	✖

Figure 3: List of Library Science courses in Panrita 4.0

The strength of e-learning is always on the content. The easier learning materials are designed, the more attractive that students might follow and understand it. The presence of current technology greatly facilitates lecturers to be able to direct their students to find information, especially in electronic forms, such as e-journal, e-books, websites, even in tutorial videos related to subjects throughout the internet. For example, information literacy course, one of the content is a video tutorial on “how to find information on Google Scholar” that one might see or download on YouTube, as seen in the figure 4.

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Figure 4: An example of content material that has links to YouTube in Panrita 4.0

Stage 4: Determining the Methods of Delivery of the Learning Programs

E-learning is a new idea in the Department of Library Science of UIN Alauddin Makassar since it was first established in 1999. Therefore, it is worth to note on how this program can run as expected. For now the teaching and learning process is carried out by combining two ways, conventional and online (e-learning). From the observations, mostly the students have smartphones or gadgets that they can use to access their subjects in Panrita 4.0 e-learning. In addition, in order to provide a new nuance in the learning process, each course should be equipped with several suggestions, instructions, tests, and feedback designed by lecturers for their students. These kinds can be done anytime and anywhere, no longer limited to classrooms. At Claroline, in which Panrita 4.0 uses it, these tools are available.

Stage 5: Determining the Assessment Methods for Programs

Panrita 4.0 in which based on Claroline, as other e-learning platforms, also provides modules to remark students' papers. Likewise, student exercises or tasks can be provided online, and the results will be directly shown on their screen. Here, role of lecturers as an instructor is indeed important, especially when designing a method of assessment in the subjects he/she teaches. The exercise module is seen in the figure below.

Latihan 2

- Nilai terendah : 20/210
- Nilai terbaik : 115/210
- Nilai rata-rata : 78,1/210
- Waktu rata-rata : 27 menit 4 detik
- Pengulangan oleh user : 23
- Total pengulangan : 29
- Ambil data penelusuran di dalam file CSV

Statistik berdasarkan user [Export]

mahasiswa	Nilai terendah	Nilai terbaik	Nilai rata-rata	Pengulangan	Waktu rata-rata
A. Itham Akbar Itham	-	-	-	0	-
Agustina Custi	115	115	115	1	10 menit 2 detik
Ahmad Husain Nur Ahmad	-	-	-	0	-
ahsana harwin sn	60	60	60	1	8 menit 40 detik
ahman fadlyyah sili nur ahman fadlyyah lahir	-	-	-	0	-
Andini haspita h. dini	-	-	-	0	-
Andini Haspita Hasul Dini	-	-	-	0	-
Angrana Anggi	105	105	105	1	48 menit 58 detik
Annisa Ibrahim Annisa	-	-	-	0	-
Avianti Rezki	-	-	-	0	-
esti wahyuni Asti	-	-	-	0	-
besse Nurhidiana Ana	50	50	50	1	33 menit 8 detik
Emawati Erna	-	-	-	0	-
Evi Zheira Ningsih Cvi	110	110	110	1	1 j 9 menit 16 detik
fadillah oktaviany muhtar Andi	70	70	70	1	37 menit 6 detik
Feredlia A Ferlie	-	-	-	0	-
feslurman Alul	-	-	-	0	-
Hil Mi SYAKIR Hil Mi	50	70	60	2	18 menit 52 detik

Figure 5: Student Assessment Test

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There are several assessment methods offered by this e-learning software which are a form of practice and assignments. Each question in either exercises form or assignments has a value/mark or score provided by lecturer. So, it depends on what score that the lectures has given for each test/question. For example, in the information literacy course, at the beginning of the class students will be tested their ability to search, find, and select the needed information through the internet. The question form is designed as clearly as possible, so based on the test results, then the lecturer is able to identify the abilities of each student. The deadline for carrying out the tasks can also be set on this system as seen in the right column of the figure above.

Stage 6: Determining and Formulating of the Expected Learning Outcomes of the E-Learning Programs

Each course in the Department of Library Sciences of UIN Alauddin Makassar had already determined its learning outcomes. As an example, information literacy course expects that every student has the ability to browse information efficiently and effectively. This expectation has clearly informed in the course description in the e-learning.

Besides, there are new expected achievements in the implementation of Panrita 4.0 in the department as follows;

- Lecturers can gain new nuances in the process of knowledge sharing and interaction with students
- Course contents might differ with the previous due to it is designed easily and more attractive,
- New method of student assessment might implement be more measurable,
- Students are fully recommended to be more friendly using Panrita 4.0 as their learning tool,
- The department should have come into contact with this kind of technological means.

Conclusion

The growing use of technology in the education sector has influenced the way how the knowledge was gained. By using Lewis and Whitlock e-learning framework that adopted by Abubakar and Hasan (2013), the department has also adopted the strategy steps to implement e-learning. The e-learning, used Claroline software due to it is an open source software and easy to use and configure. The e-learning was then named Panrita 4.0 on its header site, so faculty members are easy to be familiar with. This implementation of e-learning is expected to benefit the department and continue to develop in the future. The learning processes in the department can now be more attractive and more impressive both for lecturers and students; learning can be anytime and anywhere.

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