CONSTRUCTING ONLINE BASED HISTORY LEARNING: COMPARISON OF LEARNING CONTENT MANAGEMENT SYSTEM (LCMS) TO LEARNING MANAGEMENT SYSTEM (LMS)

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ABSTRACT

The purpose of this paper is to find a comparison between the use of QuestGarden learning content management system and Edmodo learning management system in learning particularly for the teaching of history. Characteristics of history filled with facts mastery often make teacher forget the real purpose of history learning. The abundance of facts characteristics brought up in history teaching, so it often put history learning as facts mastery learning through rote learning activity. This writing attempt to lift other approach in history learning namely online based learning that was identified can improve the ability to think. The results show QuestGarden (LCMS) or Edmodo (LMS) can be implemented in the history teaching learning, though both have different characters and use. Teachers need to understand them so that they can implement it in a synergic position.

key words: history learning, online, learning content management system, QuestGarden, learning management system, Edmodo.

Introduction

History subject is always synonymous with an abundance of fact materials related to the person’s name, event, time, so it seems to have and become a stereotype that history is identical to facts. Such understanding is not only embraced by learners, even a history teachers still have an understanding that history material is identical with factual material; that tendency is still happening in the classroom so the learning activity focuses on the provision of factual material. It needs a deep understanding of the teaching of history. Learning history cannot be interpreted simply as a transfer of learning; even more depressing if historical study is understood as a memorization of history facts activity.

In history context as substance has a very specific characteristic / character that needs an in-depth study of historical facts and narratives: the historical event was never repeated except the phenomena of history that can be repeated. Studying history means learning the substance involving the concept of space and the concept of time. Study of the historical events that can never be separated from the two elements illustrates how important these two concepts. Banks (1985:
136) stated, if the timeline will help to understand the concept of time, then the world map will help you to understand the concept of space. Precisely here is the study of history associated with the two elements, as revealed by Lucey ... *time and place what make history particularize and what make the social activities of man unique.* Spatial elements give meaning where an event occurs, while the element of time leads us to where the incident occurred, and the study of history is an analysis of facts involving the concept of space and time to the interests of contemporary life (1984: 11).

That explanation indicates history as an event will only occur once (*not repeated*), so that if a person confronted to the story of history, besides the knowledge of the events that can be elaborated through understanding some supporting facts (the time occurrence, the place where the incident took place, the people involved in the incident, and the chronological of events), it required further understanding and thinking why the event was taken up in the history discussion. In this position, discussion is not only limited to the factual presentation, but was even further to the analysis that will lead people to think of the interests of the events in history study. This is where history will be come visible element of uniqueness as the events that occur only once, and not repeated as described by Lucey (1984) above, but the phenomenon will be seen as a repetition after the analysis has been carried out. Thus, studying history do not just know factual aspects but should be up to conducting an analysis of historical event being studied, to form a comprehensive understanding.

The significance of studying history, especially for secondary education, can be observed through the objective of history. According to the curriculum document (regulation no. 14 of Program Contents) the aim of history education subjects are as follows:

1. To build awareness of the importance of time that as a process of past, present, and future.
2. To train students critical power to understand the historical facts correctly based on scientific approach and methodology of science (history).
3. To foster appreciation and respect for the relics of history as evidences of Indonesia civilization in the past.
4. To foster understanding of the learners that the formed process of Indonesia through a long historical process and still proceed to the present and the future.
5. To grow students self-awareness so they can become part of the Indonesian nation who have sense of pride and love their homeland that can be implemented in various fields of activities and field services.

Based on the description in the curriculum documents, it appears that the purpose of giving subject in school do not only stop from finding out the content of history, but also until training the students’ thinking skills, fostering attitudes, giving appreciation, and improving awareness of history.
Hertzberg reveals that to learn the past, needs to develop the skills as follows (a) skill in understanding the interpretation of history, (b) skill in using primary sources, and (c) skills in the relating between humanity and the other social studies (Hertzberg, 1985: 26-30). If we notice what Hertzberg has identified, learning history is not just memorizing facts, but tend to see the connection between what happened in the past with the present condition in order to let the students become more thoughtful, as expression “learning from history”. Therefore, in learning history, students are expected to develop critical thinking skills to social phenomena that occur in the wider perspectives.

On the other hand, Banks (1985: 226-227) argues that in history student do not only learn what is written in history books or the product of history, but also solve the problem of history through historical methodology. By using the methodology of history, students try to generalize historical events in order to understand human behavior in the past, present, and predict human behavior in the future. Thus, students can understand why human life is always changing, nothing is eternal in this world but changes. Garvey & Krug (1977: 1-2) revealed that history study that shows something different to different people involved. Consequently, studying history is an effort to gain knowledge of historical facts, gain understanding or picture of mankind in a period of time in the past, acquire the ability to evaluate and to criticize of historical writing, to learn techniques of historical research, and to learn how to write history. Based on the opinions of three experts above, teaching history is seen not only memorizing facts, but also trying to steer students to think critically. History cannot be separated from other social studies. In studying history, students are stressed more on playing the role at “historian”, who has ability to think historically.

Historical development of thinking skills can be assisted through online-based learning, because online based learning is essentially intended for developing cognitive aspects. When learners learn through internet, they are conditioned to work with a variety of diverse sources of information point of view, manage and process them into new information, as well as try to make decisions on these findings. At this position students have the option to develop higher thinking skill levels. Accordingly, there is a harmony if teachers develop the teaching of online based history, if we notice the purpose of history learning that focuses on training critical thinking through the development of rationale aspect, so online-based learning can answer those needs.

Online-based learning is developed through various models, including learning to use Internet as a medium or a source of information (technological process by utilization) and the learning that was developed specifically for particular purpose and used existing learning facilities on internet (technological process by design). Differences between both them can be seen from the function of Internet use as a medium of learning. In the first function, the use of the Internet is intended only to obtain information. This means that teacher uses this learning by accessing to the internet to enrich student learning resources. Here
the learning material (content) is not only relied on students books, but also enrich with a variety of information found on internet. In the second function, Internet use is required as part of learning process developed by teacher. Learning cannot take place if students do not access internet. Here the online functions are not only to locate the source of information but also up to the development of online based learning model.

Learning process by using technological process by design can be developed by the student through learning content management system (blog) and can also be developed through learning management system learning. Both of these learning models are often confusing for users, especially when both will be implemented; teachers are often unable to distinguish both conceptually. How to distinguish the two models of learning, and how to use them in history teaching activities will be discussed in this paper.

Online Based History Learning

The concept of e-education refers to online education process that opens limitations, so to widen open horizon. (Http://www.myeducation. Com /). E-education is not just the use of ICT in the educational process to achieve educational goals. In South African government education regulations, it clarify that the e-education is about connecting other learners, and teachers to professional support services and providing platforms for learning. E-Education will connect Learners and teachers to better information, ideas and one another via effective combinations of pedagogy and technology (www.info.gov.za/view/DownloadFileAction?id=68777). E-education is more than just the development of computer literacy skills (computer literacy) and operational skills related to various forms of information and communication technologies, but it also involves the ability to:

1. Apply ICT skills in terms of access, analysis, evaluation, integration, presenting and communicating information;
2. Creat new knowledge and information through a process of adaptation, application, design, and creation of information;
3. Improve teaching and learning activity through communication and collaboration by using ICT;
4. Serve in knowledgeable society in harmony by using of technology and mastering communication and collaboration skills.

Learning is a process of thinking and attached to culture. On one hand, learning can not only be based on facts, while on the other hand the facts of life do not stand alone but rather in form of a chain. Thus if a person learns through internet, it is not enough to just find facts, but facts also are obtained via internet search activities that must be analyzed in terms of relation to obtain an understanding of knowledge. Foox (http://miil.org/html/e-ed_vs_e-learn.html) illustrates that there seems a contrast between fundamental information (Providing facts) and
learning (*challenging to change*). It is found that the essence of e-learning is finding study compatibility and information via internet.

The ability to access the internet is not only based on the computer’s ability that can tap into Internet network, but also the skills to explore the virtual world in order to obtain the information needed (providing facts). If someone requires certain information and he tried to find information on internet, it will be exposed to approximately five billion websites information. If he/she does not have the skills to surf, it will expend money and time to obtain the required information site. At this position e-learning serves someone to be closer to the source of the information that he/she needs. When related to the concept of learning, the thinking process development through understanding, application, analysis, interpretation, it will be part of *challenging to change*. Hence learning via Internet commonly referred to e-learning implies information search process and the thinking process development.

If a teacher develops learning by assigning students to find information on internet, then the teacher is using an online-based media to help students broaden their knowledge in history learning. This model is referred to use of *media by utilization* learning. Here the teacher could have developed one of a variety of learning methods, and most importantly, when implementing learning, the teacher uses the Internet as a supporting media for material enrichment. E-learning position in learning activities is more on to look for and find information (as learning source).

It is different if a teacher develops history teaching learning where learning can be accomplished when using the specific designed through internet facility. In this position, internet media use refers to *media by design*, that teacher designs and develops learning in particular with internet technology use, or arrange facilities already developed in the internet. Today, developed and widely facilities used by teachers are blog and learning management system facilities. Both of these facilities exist on the internet, but a teacher cannot directly use them in learning activities without developing them first. Both blog and learning management system should be designed for learning activities, so that both facilities are referred as *technological process by design*.

Blog, or often known as edublog is a site created by educators, and one of its goals is to be used in classroom activities. ([http://en.wikipedia.org/wiki/Edublog](http://en.wikipedia.org/wiki/Edublog)). Blog began popular in education when developing websites (websites) has become very easy through using web 2.0 models. The use of web 2.0 (or also called blogs) does not require understanding of HTML language as it is developed with WYSIWYG (*what you see is what you get*) with charging/writing facilities similar to writing in Microsoft Word. The reluctance of teachers to use web-based learning is resolved with the introduction of web 2.0 known as blogs.

The use of blogs in education provides an opportunity both for teachers and students to broaden knowledge globally. Teachers who come from different parts of the world can collaborate in a project or learning only through «clicking». 
Wikipedia describes *Learning through blogs that allow students to take control of their own learning and steer it to their own needs. Students are able to see that opinions and even strategies are variously based on location and culture. Children are all different, but a common thread of learning can unite them. The use of blogs to face in the classroom embeds technological literacy in children that will help them their adulthood.* ([http://en.wikipedia.org/wiki/Edublog](http://en.wikipedia.org/wiki/Edublog)).

The issue does not stop until operating blog, then new problems arise, how to develop learning design if a teacher wants to use blog, because blog is not just a place for storing materials or learning material, but blog must be designed as part of learning activities. The issue continues to see the difference between blog and learning management system; and how to implement them in history learning.

**Blog Facility : QuestGarden**

QuestGarden ([http://QuestGarden.com/](http://QuestGarden.com/)) is an online site which is a tool designed for creating and improving the quality of online-based learning. QuestGarden developed by Bernie Dodge in 1995 when he used it for a program at San Diego State University. The QuestGarden development purpose is to make learning via web to be better planned and well structured, so that students can apply higher-order thinking. QuestGarden site is derived from WebQuest site, where the site is more applicable as single users simply fill in the materials and instructions to be used in learning without having hosting and domain name. QuestGarden structure consists of two parts namely (a) a section for students and (b) a section for teachers. The following figure shows the interface of QuestGarden.

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**What if History?**

by Matthew Kendziuk

This WebQuest will take you across the globe as you discover and uncover history's mysteries and exotic locations and potential alternative outcomes!

**Introduction**

You wake up like any other normal morning, you stroll out of bed, walk into the bathroom when you suddenly slip and hit your head!

When you wake up, you are in a barn. You go to grab your cell phone but nothing is in your pocket besides a few marbles. As you begin to freak out a man about your father's age, starts to yell, "Hurry up! We need to leave before all the gold is gone!"

You then walk outside and realize that you are not at home, but in a mining town in California! But it isn't the ghost town that you saw on TV, maybe because it is 1849!

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Figure 2.1.

Interface Learning Content Management System QuestGarden
Section for students consists of six subsections: (1) Introduction, (2) Task, (3) Process, (4) Evaluation, (5) Conclusion, (6) Credits. Herewith an explanation of each subsection adapted from http://www.thirteen.org/edonline/concept2class/WebQuests/index.html:

1) **Introduction:** This introductory section provides scenarios background information to motivate students. In this case, the role of students plays, for example ...if one day you wake up from bed and didn't get yourself at home ... this paragraph also shows the purpose of learning to students. The purpose of the Introduction is to make the activity into something that fun and needed by the students. Teachers must package projects related to students' interests or experience. This will stimulate students to enter and explore the tasks created by the teacher.

As an example can be seen in the figure below (adapted from a WebQuest developed by Matthew Kendziuk with the title What if History, http://www.QuestGarden.com/136/92/3/111205152031/).

![Introduction Part](image)

What is listed in the introduction reflects the existence of an illustration will be developed by teachers in a learning activity of the project. It seems that teachers want to provide opportunities for students to develop the ability to imagine history through ... if history ... here is reflected the learning objectives developed by the teacher.

2) **The Task:** a formal description of what should be done and completed until the end of the WebQuest. First of all, teachers find resources that enrich the topic, then design activities based on sources of information comes from various sites on internet.
Developing this task (which is actually identical to «research question») is a difficult aspect and show creativity of the teacher in making a WebQuest. Students Work performance may include publishing findings on internet, collaboration to accomplish the task with students from other schools, or create multimedia as part of the task. This activity should be challenging and fun for students. The following figure shows the tasks to be performed by students.

![Task](image)

**Task**

You (the mayor) and two others (city engineer and the sheriff) have been left in charge of all city operations.

As of right now you only have a town hall and a few ranches on the outskirts of town.

As Mayor how will you make your town prosperous? What buildings would you have? What services would your city provide?

After deciding on what kind of buildings and services your town will have you must pass the plans on to the city engineer.

The city engineer will take the plans from the mayor. With the plans in hand the engineer will make a scale model of the town. The model will be elaborate a the President (the teacher) will inspect every detail.

*be creative (Legos and Lincoln Logs)*

Since your town has been prosperous bandits have been causing trouble in the mines and in town! As sheriff it is your duty to defend the citizens of the town.

How will you protect the town? What laws would you make? How would you enforce these laws?

**Figure 2.3**

**Task Part**

Based on the delineation of the tasks above, it appears that the teacher has designed activities for students; what the problems encountered and how to solve the problem.

Types of tasks that are considered successfully implemented by students can be repeated several times, either for different class or semester, with a record of each modified task unit, have caused students be challenged to perform more tasks and more in depth than the previous tasks.

3) **Process:** This section described the steps that must be passed by student to complete the task, including the links that were developed to complete each step. For example, the continuation of the What if History site contains the following process.
Figure 2.4
Process for Day 1

**Process**

**DAY 1**
- Decide group responsibilities
- Research the Gold Rush and Frontier Town

*The California Gold Rush, 1849*
*American Experience | The Gold Rush | PBS*
*Gold Rush! California’s Untold Stories, Oakland Museum of California.*
*The California Gold Rush (1848 to 1859)*
*WayBack . Gold Rush | PBS KIDS GO!*
*Gold Rush Sesquicentennial*

**Day 2**
- Mayoral duties are to be completed!
- Sheriff duties are to be completed!
- Since the engineer has a large task at hand the only way a frontier town can survive is by working together!

**Day 3**
- Finish construction of town.

**Extra Credit!**
- There has been a mythical bandit on the loose!
- Make up a story of a bandit, his/her treachery, how you caught them!
- Must be two pages long!

Figure 2.5
Process for day 2 and day 3

Figure 2.4 and Figure 2.5 show processes that must be passed by the students for working on the project. In this case, in details, teacher has designed a process that will be passed by students during three days. Students have to do what has been written by the teacher. On the first day, students are required to conduct research about Gold Rush and Frontier Town through observation of the determined sites. We see that online-based learning does not mean freeing students access freely internet without a clear direction and even the teachers have set the address of the site to be visited and explored by students. On the
second day, every member of the group completed its task in accordance with their respective roles, and on the third day, they must have completed the construction of the city. The group will earn an extra score if they are able to make a two-page stories about their adventures in catching and punishing the bandits of the city.

4). Evaluation: Each WebQuest needs a rubric for evaluating student work. In this section, it contains a rubric so that students can measure their own achievement of their duties. Rubric developed based on clear, consistency, fair, and specific measurement of each task. The following image is displayed for What if History project evaluation rubric.

Based on the developed rubric designed by teachers, it appears four aspects that were measured and each aspect gains a score based on the content of the rubric. The more complex the job that has been done, the higher the score will obtained.

5. Conclusion: This step is intended to allow students reflect and teachers see summary of students work. In this case, one of constructivist principles applied as we learn by doing, but we learn even better by talking about what we did. Teachers provide reinforcement to students through showing if they do things differently, then they will get a better lesson.
6) **Credits**: contains sources or references used by teachers, related to copyright issues, because the use of this reference is not intended for commercial reasons. Section for teachers consists of five sub-sections, namely (a) Introduction, (b) Learners, (c) Standards, (d) Process, (e) Resources. There is not that much different contents of each subsection in this section, unless on learner subsections contain grade or class taught by a teacher.

When examined, QuestGarden blog site is designed as a site of inquiry oriented, which means that well structured learning steps, diverse learning resources use are, and student center learning activities. In further development, this contains learning activities and content material known as Learning Content Management System (LCMS). According to Dodge (http://webquest.sdsu.edu/about/webquests.html), focusing on this site consists of two levels. In the short term level, the intended use of this site is to obtain an integrated knowledge and thinking dimensions development, so that short term rates are designed only limited to one to three times face to face meetings. At long term level, the QuestGarden use goal is the establishment of long-term thinking skills (extending and refining knowledge), when using QuestGarden finished in the long run, students are able to conduct an in-depth analysis, transfer of knowledge through a variety of ways, and demonstrate understanding of creating something new based on previously acquired understanding. In this case, it requires one or more period design of learning by using this learning facility.

The focus of Learning Content Management System is on learning content. In this case, the material content and process development carried out by designers, developers, and teachers efficiently. The existence of a structured form allow teacher as user to duplicate, re-assembly rapidly, based on new material (Greenberg, 2011). QuestGarden site use is intended for the development of well-planned learning. The steps are well structured, and students are asked to follow every step to complete learning activities.

Levels of thinking can be developed through QuestGarden based learning activities in accordance with those expressed by Marzano (1992) as follows.

1. **Comparing**: Identifying and articulating similarities and differences between things. Classifying: Grouping things into definable categories on the basis of their attributes.
2. **Conducing**: Inferring unknown generalizations or principles from observations or analysis.
3. **Reducing**: Inferring unstated consequences and conditions from given principles and generalizations.
4. **Analyzing errors**: Identifying and articulating errors in one's own or others thinking.
5. **Constructing support**: Constructing a system of support or proof for an assertion. Abstraction: Identifying and articulating the underlying theme or general pattern of information.
QuestGarden appears to be most appropriately used in teaching history, because, as mentioned in the introduction, the study of history requires elaboration in thinking. If history teachers develop information technology-based learning, especially using QuestGarden, the purpose of learning on the aspects of the thinking skills development can be resolved.

This QuestGarden site is not difficult in use, because the site is included in the categories of web 2.0 that do not require HTML language skills. All sections and subsections facilities are available so that teachers can fill the content. For students, the use of QuestGarden site is also very easy, because technically the navigation keys are developed in accordance with the sequence of learning activities in class. By following the flow of the navigation buttons from the beginning (introduction) to the end (evaluation), the students carry out learning activities with student-centered approach.

Learning Management System Facilities: Edmodo

Edmodo first developed by Nicolas Borg & Jeff O’Hara in early 2010, technology experts who work in the Chicago area. This site is a social networking site exclusively for educational interface design developed much like the Facebook site. In general we can say that: Edmodo is a secure, social learning platform for teachers, students, schools and districts. We provide a safe and easy way for your class to connect and collaborate, share content and access homework, grades and school notices. Our goal is to help educators harness the power of social media to customize the classroom for each and every learner (http://help.edmodo.com/?subdomain=www). Because Edmodo form of social networking sites, the site is categorized in the Learning Management System (LMS), that the application software used for documenting, administering, tracking, and reporting a program of education / training, classroom activities program, e-learning, as well as content of the program. Furthermore, the LMS is described in the forms of the followings:

- centralize and automate administration
- use self-service and self-guided services
- assemble and deliver learning content rapidly
- consolidate training initiatives on a scalable web-based platform
- support portability and standards
- Personalize content and enable knowledge reuse. (http://en.wikipedia.org/wiki/Learning_management_system).

The Scope of Learning Management System ranging from systems for managing the program (specific training or education) to the software used as a distributor of materials through internet which also has features for online collaboration. Some web-based LMS are developed to help students access learning content and administer learning activities, and LMS Edmodo developed a web-based interface with a display similar to Facebook. This is intended for users in order not to experience difficulties when accessing Edmodo (user friendly).
As a learning management system, Edmodo provides features such as site for assignments, check grades, write a post that can be read by teachers, friends, and parents. Besides using facility to make the assignment, teacher can also develop quizzes, polls, discussion or send material which can be used to fill the students’ learning. Delivery of materials can be performed quickly (real time) and does not require paper. In addition, teachers can also form a group which is a manifestation of the class, so that, if a teacher teaches in some classes, through a single account in Edmodo, teacher can form groups of as many as classes. (http://en.wikipedia.org/wiki/Edmodo). The advantage of using Edmodo is besides can be accessed via PC or laptop, it also can use the mobile application (HP, android, tablet, IPAD), so communication can run at any time. The following figure shows the layout of Edmodo interface.

Edmodo in learning focuses on the design of management for a period, not to the implementation of face to face learning in the classroom. Teachers can design tasks inserted through the navigation assignment buttons and determined task execution time. In terms of students’ work tasks can be grouped by forming small groups. Having completed the task of working through a column of the task then sent directly by the students, so teachers can check out these tasks and provide an assessment of the results of task execution. Teachers can also provide feedback on the results of task, so there is no need of paper (paperless). The following figure shows an example of an assignment that was developed by the instructor.
If students have questions, then questions can be raised through a posting on the wall so that it can respond to questions by both students and teachers. Learning materials such as manuscripts/articles, videos, pictures, etc. can be incorporated into the library, making it easier for students to access learning content material. Judging from how it is used, it appears that Edmodo is a learning management system; the development of internet-based learning management. The following figure shows the results of the assignment scoring.
The Learning Management System is essentially strategic solution for planning and managing all learning events within an educational unit, including online based activities, virtual classrooms, and teachers or instructors. The main solution, LMS development is to replace educational programs that are isolated and fragmented into systematic educational activities in order to improve competency, skills, and educational organization performance (Greenberg, 2011)

Comparison of the use of Learning Content Management System (QuestGarden) with Learning Management System (Edmodo)

Based on the exposure in the previous section, comparing Learning Content Management System (QuestGarden) with the Learning Management System (Edmodo), it is indicated that both are tools to develop an online-based learning in a position of technological process by design. Both LMS and LCMS are used to manage student content and performance, and can be developed to the level of learning objectives development. Learning management system (in this case, Edmodo) is used to manage learning and to design curriculum based on online content and activities both in the classroom and virtual classroom, as well as collaboration between teachers or between schools. On the other hand, LCMS (in this case, QuestGarden) is used to develop learning activities based on learning objectives, content, content and process, learning activities, and learning outcomes evaluation.

Even though both are similar, conceptually Learning Content Management System (QuestGarden) is different if compared to Learning Management System (Edmodo). Brandon Hall (Greenberg, 2011) gives the difference of the two systems in tabular form as follows.

<table>
<thead>
<tr>
<th></th>
<th>LMS (Edmodo)</th>
<th>LCMS (QuestGarden)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who benefits?</strong></td>
<td>All learners; organization</td>
<td>Content developers; learners who need personalized content</td>
</tr>
<tr>
<td><strong>Provides primary management of</strong></td>
<td>Learner performance; Learning requirements; Learning program and planning</td>
<td>Learning content</td>
</tr>
<tr>
<td>Manages e-learning</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Manages traditional forms of training, such as instructor-led</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Tracks results</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supports learner collaboration</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Includes learner profile management</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>Allows HR and ERP systems to share learner data</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Schedules events</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Offers competency mapping/skill gap analysis</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Includes registration, prerequisite screening, and cancellation notification</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Creates test questions and test administration</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supports dynamic pretesting and adaptive learning</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Supports content creation</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Organizes reusable content</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Includes workflow tools to manage content creation process</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Develops content navigation controls and user interface</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Italic font display shows the difference (modified by author)

Based on the above table, we can see differences based on several criteria as (a) display interface, (b) purposes, and (c) function.

**a. Difference from interface display.**

The interface display clearly shows the difference, not only from the differences in shape but also the interface reflects the functions and capabilities of the site. A very simple QuestGarden interface and on the left arranged navigation key reflect the learning steps designed by teachers, so that it can be said that QuestGarden is a Learning Content Management System site. Edmodo interface is almost similar to social networking interface site, Facebook. Based on the appearance of the interface that has no specificity in the design refers to learning activities, it can be said that Edmodo is a Learning Management System site.

Students who go to the site can choose what activities to do, whether to look for task, search the material stored in the library, see score assessment results of his work, saying hi with peers, or to question the teacher/instructor.

Another thing that is visible from the interface display in the LMS (Edmodo) is a schedule (schedule events) for example if teacher put the command task to be done by students, then the command is accompanied by a task completion time schedule. This is very different compared to the LCMS (QuestGarden) that has no timetable (schedule events).

LMS (Edmodo) has notification and student must be registered in the virtual classroom, LCMS does not have the feature, because LCMS is more on structuring of the content so that anyone can get into the teacher-developed site without encounter any notification.
b. **Objective Based Distinction**

The goal of the two site models is very different. LMS objectives for managing the learning program, students performance, as well as student learning outcomes, whereas LCMS objective is to manage learning content. Thus LMS will provide benefits to the institution as a whole, while LCMS is more beneficial to students who require specific content.

c. **Based function Distinction**

LMS functions (Edmodo) is a manager of learning and curriculum designers (lesson planning) for a certain period, while LCMS (QuestGarden) serves as the manager of learning content, so that LMS has a schedule (the schedule) while in LCMS, schedule does not appear. In addition, through LMS, analysis can be done if it found students gap (through posting or note) and delivery can be made directly to students; this cannot be done in the LCMS.

Since the function of LCMS is to manage content, it can be developed in the creation of learning content, so that LCMS can support the occurrence of adaptive learning.

** Integrating LCMS into LMS **

Looking at the characteristics of the site based on the similarities and differences in LMS and LCMS website, it appears that the use of the two is inseparable. This means that if a teacher wants to develop history-based teaching learning online, then he/she must use either LMS or LCMS. Both have different functions, but complementary, so that the synergy of the two models of sites can give, history teacher will produce output as expected.

When a history teacher will develop history learning plan for a certain period, he can use LMS by creating a virtual classroom through group, inviting students with a code number so that students enter the virtual classroom. After that, teacher can develop planning during the period by sending note, including the plan to do an assignment, quiz, or test with a preset time. This plan can be supplemented by providing learning materials. Completeness of the content study, the assignment, quiz, test, and implement the orders of learning are developed through the LCMS, so all content can be linked to LMS via LMS library. Each student’s task or work assignment in LMS and teachers provide space so that students can incorporate his work into LMS. Then, teacher examines student work and gives score to the achievement of these results in the LMS.

The synergy between LCMS and LMS will make teaching learning history intact, and can develop according to the needs of students. On one hand, teachers can design a student-centered learning through the learning developed in the LCMS (QuestGarden). Teacher can elaborate student knowledge and skills in terms of understanding the content and developing thinking skills for all tasks that the teacher gave is well designed and judgments rendered pursuant to the
development of assessment rubrics. On the other hand, both teachers and students can communicate and assess the progress and success of learning via LMS.

**Conclusion**

Online-based learning not only use internet in teaching and learning activities; isolating students into a less socializing situation. The problem that often arises is the lack of teachers in using internet when they want to develop an online-based learning. This paper described the position of developing online learning based on learning needs (*technological process by design*).

There are two models that were developed through technological learning process by design, the learning management system (LMS). This form appears in Edmodo site, and is a site that looked like Facebook, and can also put in a category of social networking sites, but specifically developed for educational purposes. Through this site teachers can manage learning for a specific period, and between teachers and students can also develop two-way traffic communication; so it is difficult to say that online based learning will isolate the social development of students.

The second form is a learning content management system (LCMS) that appear in QuestGarden site. The site built by Bernie Dodge is a site to develop learning through web to be better planned and well structured, so that students can apply higher-order thinking. QuestGarden blog site is designed as a site of inquiry-oriented activity, which means that learning derives in a well structured steps, the use of learning resources are very diverse, and activities will center on student learning.

Both sites cannot be optional, but they would be very meaningful if teachers synergize using both site models. Thus, development of information technology must be coupled with the development of teacher skills in using the information technology, furthermore learning that is developed in the classroom becomes better and be able to achieve the goal of developing students’ thinking skills.

**REFERENCES**


Bernie, D. (----). *Some Thoughts About WebQuests*. Available at April 2012]


**Learning Sites:**
LMS: [www.edmodo.com](http://www.edmodo.com)
LCMS: [www.QuestGarden.com](http://www.QuestGarden.com)

National Education Minister Regulation no. 14 on Program Content