# E-Learning Based Facility Management in English Language Learning

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#### Abstract

The development of science and technology brings very significant changes in learning English. The use of Information Communication and Technology (ICT) is one of the innovations in English learning today. ICT-based English learning facilities are developing very rapidly and become one of the indicators in the 4.0 industrial revolution. One of the English language learning facilities in the 4.0 era is E-learning. E-learning is a learning process that utilizes information and communication technology (ICT) effectively. systematically by integrating all learning components, including learning interactions across space and time with guaranteed quality. This e-learning-based English learning will be successful if it is managed properly to achieve the learning objectives. Therefore, an e-learning-based facility management is needed in order to plan, organize, apply, and evaluate learning. The method used is literature study by collecting theory from various sources, such as books and academic journals. This article aims to discuss the management of e-learning-based English learning facilities. It can be concluded that the management of language learning facilities includes e-learning planning, e-learning material design, delivery and interaction in e-learning and evaluation of learning outcomes and evaluation of e-learning programs are important to achieve the goals of English learning.

Keywords: E-Learning, Facility Management, English Language Learning, Quality Standards

## Introduction

The main functions of learning management are planning, organizing, teaching and supervising (Sa'ud and Sumantri, 2007). An important function of learning management is carried out by utilizing elearning. Kusmana (2011) says that teachers can integrate e-learning into the Learning Implementation Plan (RPP) that is made and implemented by each teacher. Kusmana (2011) also emphasizes that lesson plans that integrate e-learning and learning can be made with two approaches, namely the ideal approach and the practical approach. The ideal approach begins by defining the topic, the learning objectives to be achieved, and defining the relevant learning activities using e-learning to achieve these learning objectives. The practical approach begins with identifying existing e-learning uses, selecting topics that can be supported by e-learning, and planning relevant learning strategies.

Effective learning also requires effective management. Syafaruddin and Nasution (2005) state that effective learning by professional teachers is managed by good learning management. A related previous study conducted by Kyakulumbye and Katono (2013) on practical management to integrate technology into the curriculum. Successful integration of e-learning into the curriculum requires a measured leadership style and strategy. Integrating e-learning into the curriculum requires good curriculum and learning management. Therefore, as the main manager of e-learning-based learning, teachers need a management model that can provide a complete picture of the stages of e-learning learning management. The main functions of learning management are planning, organizing, teaching and supervising (Sa`ud and Sumantri, 2007: 131). With regard to the integration of e-learning into learning, all important functions of learning management are carried out in order to utilize information and communication

technology. Learning institutions play an important role in supporting successful learning in schools, enabling them to achieve optimal learning goals and improve the quality of their education. Students can learn well if the school can meet all learning needs. Suryosubroto (2009) states that in this case facilities are equated with facilities or infrastructure, because facilities can accelerate the realization of business and can be in the form of goods and objects. Learning facilities are one of the attractions for students to study. Their existence and integrity are very important to improve the quality of the learning process. Not only the existence and integrity of learning facilities, but also the management or leadership of these learning facilities is important. The presence of managers of school learning facilities in schools. It has been confirmed by Dimyati and Mudjiono (2009) who explain the teacher's role such as: Maintaining and managing learning objectives and Organization of students who study in accordance with adequate equipment and infrastructure. The management of learning facilities that are not managed according to the needs and knowledge of the school can significantly disrupt the learning process and make it difficult for students to learn.

Dalyono (2015) explains the existence and integrity of learning institutions. Less optimal management of learning facilities has an impact on delays in the implementation of the learning process. Learning facilities that are not managed properly can lead to inaccuracies in their management. Inadequate learning facilities are one of the problems faced by schools. It is because managers do not understand the regulations of educational institutions and the standards of facilities and infrastructure that meet their needs. In addition, the procurement of learning facilities in educational institutions is not balanced with their maintenance, and learning facilities in educational institutions are damaged so that they are not feasible to support learning activities. These conditions affect the effectiveness of learning and student learning outcomes. One of the language learning options in the revolution 4.0 era is e-learning using the "LMS" learning management system.

To make effective use of e-learning, it is necessary to manage e-learning-based language learning facilities with the aim of improving English learning in order to achieve learning objectives. A common problem faced by schools and universities related to e-learning facilities is the ineffective use of e-learning due to the ineffective management of e-learning-based language learning facilities in schools and colleges.

## Methods

The author uses library research methods. The author reviews journals, books, reports, websites and scientific articles, and other academic publications related to the management of e-learning-based English learning facilities. The author reviews several theories, and the results of research on e-learning and the stages of management of e-learning-based language learning facilities as well as e-learning quality management as an effort to monitor the use of e-learning.

## **Results and Discussion**

#### Understanding e-Learning

E-learning is an abbreviation of Electronic Learning, a general term for internet-based and intranetbased online learning. E-learning can improve the learning process to be more effective because it can help distribute learning materials with digital facilities (Barbara, S., Wagner P., et al, 2008).

Philosophically, e-learning is explained by Kamarga (2002) as follows: 1) e-learning is the provision of online information, communication, education, and training. 2) e-learning provides various tools that can enhance traditional learning (traditional learning models, textbooks, CD-ROMs, computer-based training) to meet the challenges of globalization. 3) It will not replace the traditional education model in e-learning classes but will be strengthened through content enrichment and the development of educational technology. 4) The ability of students varies greatly depending on the type of education.

The definition of e-learning is an effective learning process resulting from a combination of learning support and digital distribution of material consisting of services (Barbara, S., Wagner P., et al, 2008). Thompson, Ganxglass, and Simon (Simamora, 2003) define e-learning as a learning experience provided through electronic technology. In addition, according to Rosenberg (2001) e-learning is the use of technology that can be a solution to learning problems using the internet and technology. The power of internet, intranet, extranet. More specifically, Rosenberg (2001) defines e-learning as the use of internet technology to distribute learning materials and make them accessible to students from anywhere. On the other hand, according to Khan (2005), e-learning refers to providing learning materials to anyone, anytime, anywhere, using various technologies in an open and flexible distributed learning environment. In addition, the term open and flexible learning refers to the freedom of learners regarding time, place, pace, content, learning style, type of assessment, collaborative, or independent learning.

## Management of e-Learning in Learning English

As an English learning facility, e-learning has management stages starting with planning, material design, delivery, interaction, and evaluation. All these levels need to be properly regulated so that e-learning facilities can help achieve learning objectives. Widanarko (2007) describes four levels of e-learning-based facility management as follows:

#### a. Planning learning based on e-learning

The e-learning based learning plan consists of three components. The first component consists of items which are objects and materials for learning English. The second is the distribution system of English learning materials, and the last is interaction.

In planning the learning of English learning objects and materials, preparations must be made which include the learning process from ability analysis, formulation of learning experiences, and the relationship between learning materials and learning time and distribution of learning materials in the form of text, images, videos, audio, simulations, presentations electronics, links to other resources, glossaries, and more. In e-learning there are dialogue activities, on the other hand, in the form of discussion forums, conference calls, face-to-face meetings, use of email and discussions, blogs, and forum moderation. Assignments can be in the form of study assignments, independent tests, quizzes, tests, and others.

To implement e-learning planning effectively, it is necessary to set quality standards and expected indicators at the planning stage and implement e-learning quality control standards by: first, the courses offered must be confirmed by the faculty or university and prove the existence of a suitable course design. approved by the faculty/university. The second quality standard is teachers and students need intranet and internet access and the availability of intranet or internet access must be proven easily, cost-effectively and at a reasonable speed. The third quality standard is that teachers need access to e-learning-based language learning facilities. This facility has an indicator of the availability of access and appropriate facilities for the development of learning through e-learning. The fourth quality criterion is the availability of these books can be accessed by students. The final quality criterion is the availability of access to e-learning training facilities with indicators of the availability of these facilities in e-learning.

#### b. Designing e-learning-based English learning materials

Teaching material design activities are activities that the aim to achieve learning objectives. When designing English learning materials, it is necessary to pay attention to the learning path. This involves implementing support, developing concepts, and implementing co-development. This learning path helps guide students from the simplest to the most difficult, from the simplest to the most complex, and from the superficial to the great levels of thinking. (Mutia, I. & Leonard. 2013)

Quality control in the design and production of English learning materials includes six quality standards. First, the material must be in accordance with the syllabus, and electronic media must have

indicators of conformity between the material and the syllabus. Second, materials are made by experts related to indicators, and material documents are approved by scientific experts in their respective fields. Third, the design and manufacture of materials must be in accordance with the characteristics of e-learning as well as indicators of conformity between material design and e-learning characteristics. The fourth quality requirement is that the material must be available and accessible to students, regardless of location or time. The final quality standard is the implementation of e-learning in accordance with applicable rules, regulations, and laws, accompanied by indicators that the e-learning implementation process is in accordance with expert rules and regulations (Ulf-Daniel Ehlers2006).

#### c. Submission and interaction

Aspects of e-learning-based management regarding delivery and interaction need to pay attention to the rules of the game, initiative and motivation, assignments, trouble shooting and synchronous activity. In delivering and interacting in e-learning, teachers need to apply various strategies such as questions and answers, discussion forums, student activities, interesting topics, tests, examples and analogies, visual information and student review/summary in the implementation of learning.

There are five minimum quality management standards related to the material in e-learning, namely the material available in electronic presentations with indicators of diversity and various forms of electronic presentations used in e-learning. The second quality standard is that the delivery of material must be in accordance with the mapping program that has been determined with indicators of conformity between the method or method of delivery and the predetermined mapping program. The third quality standard is that the material must be attractive in terms of content and layout, up-to-date, and free from errors with indicators that the available material can be easily updated and up to date and the material displayed is attractive, easy to understand and error free. The fourth quality criterion is the availability of materials for face-to-face. The last material provision is the availability of supporting facilities that make it easier for students to access parts of the material, such as law and copyright.

Quality standards are required in relation to interactions when learning English. Consists of two criteria. It means that learning must use indicators of the availability of these interaction designs in e-learning to ensure interaction between students, instructors and students, and between materials and students. The second quality criterion requires that interactions be carried out synchronously or asynchronously and indicators are used to indicate the occurrence of both synchronous and asynchronous interactions.

#### d. Evaluation of e-learning

Evaluation of the implementation of e-learning includes evaluation of effectiveness, cost effectiveness, student and stakeholder satisfaction and sustainability factors. At the evaluation stage, the implementation of quality control must meet four quality criteria. The criteria are instructor, student, content, process, organizer, implementation, material and accessibility ratings. The second quality criterion is the need for a physical identification mechanism for students. Third, the assessment must be included in the research information system applicable at the university, and finally, the assessment of student learning outcomes is discussed.

Web-based learning products such as e-learning are unique compared to other types to make sure the criteria to determine their quality. This is a way to get certified e-learning products that actually meet the specified criteria. According to Alessi and Trollip, to continuous evaluation, there are two types of alphas and beta testing when developing educational software, at least after the program is complete, it needs to be evaluated. In the Alpha test, several collaborators, including development staff, instructional designers, materials experts, and media experts, run the program from start to finish to demonstrate the feasibility of the learning program and the feasibility of the materials. The developer himself or a member of the development team knows the program well and responsible for conducting ongoing evaluations.

Unlike continuous evaluation, which does not require a specific format or set of questions, when applying an alpha test, it is necessary to create a special question format to assist evaluators in evaluating

e-learning products. In addition, evaluators consisting of professionals, education professionals, and media professionals must be able to do their job properly and thoroughly, not just filling out and answering questions. The opinions and suggestions of evaluators are very important for improving the quality of e-learning products. The list of questions given to evaluators during the alpha test can be customized based on needs. Aspects of teaching materials consist of several sub-aspects related to the quality of teaching materials. This aspect of the material needs to be evaluated by a responsible material expert. When creating e-learning for English lessons, evaluators from the substantive aspect include English teachers, or professionals or practitioners working in the field of English. First, the evaluator needs to ascertain whether the material presented in e-learning is in accordance with the learning objectives. The reviewer also needs to ensure that the material is explained in depth based on the level of education of the user. Second, materials specialists need to ensure that the structure of the material conforms to the rules of the relevant scientific field, and that the materials and terminology used are precise and error-free. Other important things are grammar, spelling, punctuation, and accuracy of other things related to writing. This e-learning material is intended for the general public and may not use terms or terminology that refer to certain ethnic groups or cultural groups. This aspect refers to the appearance of e-learning product. It is an interface component or something that connects the learning material content with the user.

E-learning and multimedia are intended for independent learning; therefore users must have great control over the course of the learning program. Developers need to improve and revise the product, so that a quality product is produced. After all errors and errors have been fixed by the developer, then an evaluation is carried out by the target user or actual user, which is called beta testing. Beta testing is a thorough evaluation by users of e-learning products that have been repaired at the alpha testing stage.

In beta testing, e-learning products are tried to be used thoroughly by target users, namely students who are targeted to become students of learning materials in the e-learning. Respondents or evaluators for this beta testing are students who are targeted as users of the e-learning course. The minimum number of respondents is three people, where one person represents a group of smart or potential students, another person represents the medium or average group, and one from the lower or low group.

After selecting the right number of respondents, it is necessary to explain their role and the purpose and objectives of the beta test as well as to record and comment on any issues related to program weaknesses.

The implementation of summative evaluation often uses the well-known four-level Kirkpatrick model to evaluate learning programs including e-learning programs. The following figure shows the four levels in Kirkpatrick's evaluation model.



Figure 1. the Four Levels in Kirkpatrick's Evaluation Model

1. Reaction

The first step with the Kirkpatrick model is to measure user satisfaction with the developed elearning product. The results of this assessment cannot indicate the level of effectiveness of elearning, but at least a high level of satisfaction indicates that users are satisfied with the e-learning program and users continue to use e-learning materials. To carry out this Level 1 assessment, it is necessary to compile a survey to collect information related to the e-learning program that is being developed. Ideally, this survey would collect as much information as possible from the program being evaluated but would require as little processing time as possible. The following are some steps that need to be considered to optimize the implementation of this Level 1 assessment: What information in the e-learning course do respondents need.

2. Learning

The second level Kirkpatrick score is used to determine the effectiveness of e-learning product learning. This assessment makes it possible to prove that it has actually been studied. After using e-learning, e-learning is considered effective if at least one aspect of knowledge, skill, or attitude improves. Conducting a second level assessment is certainly more difficult than knowing student satisfaction at the first level.

3. Behaviour

Behavior can be seen from Kirkpatrick's Level 3 rating. Therefore, Level 3 assessment is rarely carried out, especially in the context of learning in schools. This fourth level assessment is the most difficult of the Kirkpatrick model because it seeks to determine the ultimate impact of e-learning.

4. Result

This fourth level assessment is the most difficult of the Kirkpatrick model because it seeks to determine the ultimate impact of e-learning. In the context of education and learning, the impact indicators can be in the form of an increase in the performance index (IP), an increase in the number of graduates, shorter learning time, shorter waiting time for graduates, and so on. Like stage 3, it is difficult to complete stage 4.

# Conclusion

Management of e-learning-based English learning facilities is management that regulates how elearning can be used effectively in order to increase the effectiveness of language learning which includes e-learning planning, designing English learning materials in e-learning, delivering materials and learning interactions. The four management steps must go well through the supervision of teachers, stakeholders in educational institutions by carrying out supervision by setting quality standards and indicators in each of these management processes. It is hoped that with these quality management standards, the use of elearning for teaching English can be controlled and implemented properly so that the objectives of teaching and learning can be achieved and run effectively.

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