

Utilization of Information and Communication Technology for Learning in the Implementation of Curriculum 2013

Eldarni

Universitas Negeri Padang
Padang, Indonesia

Mutiara Felicia Amsal

Universitas Negeri Padang
Padang, Indonesia
mutiaraamsal@fip.unp.ac.id

Abstract— This study aims to: 1) to describe the learning plan in English-speaking skills by using cloud computing, 2) determine the implementation of English speaking skill by using cloud computing cloud computing, 3) know the assessment in learning activities on the skills of speaking English using cloud computing. Data were collected using observation, interview, documentation study and test. The subjects were teachers and students. The results showed that the use of cloud computing include the implementation of learning, evaluation of learning and improving student learning outcomes goes well. The conclusion of the study: 1) In learning plan, cloud as a media, 2) Implementation of the learning by using cloud computing makes it easy for teachers to deliver material and help students to seek more knowledge about how to speak English, 3) learning to use cloud computing is done in three stages. At attitude competency assessment, the use of cloud can help teachers more thorough look at the development of students' attitudes on how students perform well in accordance with the instructions he had given teacher, accuracy in collecting a given task.

Keywords— Cloud Computing, English Speaking Skill

I. INTRODUCTION

Foreign language functions [1]: For the development of science and technology andFor the benefit of international communication in order to establish friendship and world peace.

But the lack of motivation and interest of students in learning a language becomes the most important aspect in learning a language. This lack of interest and motivation can be caused by various factors, internal and external. Internal factors can be caused by lack of willingness to learn a language, feeling that they are unable to learn a foreign language, or not feeling interested in learning a foreign language. While external factors can be caused by an environment that is not or less supportive, friends, and others.

ICT-based learning was originally based on behavioristic theory, where this theory was pioneered by Thorndike (1913), Pavlov (1927), and Skinner (1974) which stated that learning is behavior that can be observed which is caused by an external stimulus [2]. Furthermore, the development of ICT-based learning is based on cognitive psychology theory which

states that learning includes the use of memory, motivation and thought, and reflection. The emergence of constructivism pioneered by Piaget, Bruner, and Vygotsky in the early 20th century had the view that knowledge and understanding were not passively obtained but in an active way through experimental experiences and activities.

The internet has a significant effect on learning processes and outcomes in the classroom and outside the classroom, namely enabling independence, acceleration, enrichment, expansion, effectiveness and productivity of learning. Through the internet students will be stimulated to continue learning according to their potential and skills. Allowing him to develop his creativity and independence in learning and conversely learning through the internet demands creativity and self-reliance.

According to Vygotsky that learning is meaningful, it needs to be designed and developed based on the condition of students as the subject of learning and the socio-cultural community in which students live (Moll, 1994). According to Waidl, important things that must be understood are related to students or learning participants as individuals that students are human beings who have history, creatures with uniqueness (individuality), always need socialization among them, have a desire to connect with the natural surroundings, and with their freedom process the mind and sense of meeting with the Transcendental (Admadi & Setiyaningsih, 2004).

In terms of cognitive, creativity is the ability to think that has fluency, flexibility, authenticity, and detail. In terms of effectiveness, creativity is characterized by strong motivation, curiosity, interest in multiple tasks, courage to face risks, not easily discouraged, appreciating beauty, having a sense of humor, always wanting to find new experiences, respecting yourself and others. Creative works are characterized by originality, have values, can be transformed, and can be condensed [3].

In teaching, the teacher already knows the goals to be achieved in teaching a subject. For this reason there is a formulation of Special Instructional Objectives, which is based on Bloom's Taxonomy of behavioral goals (Bloom, 1956), which includes three domains: cognitive, affective, and psychomotor. Gagne suggested five kinds of learning

outcomes, three of which were cognitive, one affective, and one psychomotor [4].

Learning theories support the characteristics found in cloud computing [5]. Cloud computing consists of five main characteristics, namely:

- 1) On Demand Self Service (self-service when needed). Users can order and manage services without human interaction with service provision, for example by using a web portal and interface management. Procurement and related service and resource supplies occur automatically at the provider.
- 2) Broad Network Access (large network access). Available services are connected via a broadband network, especially to be accessed adequately via the internet network, using either thin clients, thick clients or other media such as smartphones.
- 3) Resource Pooling. The provision of cloud services provides services through resources grouped in one or various data center locations consisting of a number of servers with a multitenant mechanism.
- 4) Rapid Elasticity. Computational capacity provided can be elastic and fast provided either in the form of additional or reduced capacity required.
- 5) Measured Service. Available cloud resources must be able to be regulated and optimized for use with a measurement system that can measure the use of each computing resource used.

Cloud computing is internet-based computing, where shared servers provide resources, software, and information for computers and other devices on demand, such as with electricity networks. Cloud computing is natural from the broad adoption of virtualization, service-oriented architecture and utility computing.

Cloud computing is a combination of the use of computer technology (computing) in a network with the development of internet-based (cloud) that has the function to run programs or applications through computers that are connected at the same time, but not everything connected through the internet uses cloud computing (cloud computing). Gartner defines cloud computing as a way of computing when IT services that are easily developed and flexible are provided as a service for customers using internet technology. According to IEEE Journal cloud computing is a paradigm where information is permanently stored on servers on the internet and temporarily stored on the user's computer (client) including desktops, tablet computers, notebooks, handhelds, sensors, monitors and others.

Cloud computing is an IT service carried out by a company where users of the service do not need to prepare their own devices because they have been provided by the company. This service is an internet-based service where all needs will be served using an internet connection. This can be called Cloud. Cloud computing is one of the combined uses of internet-based computer technology and is a new technology trend that is being developed. Cloud computing runs the needs of users outside the company itself so that it is likened to user

needs stored permanently in the cloud or on a server on the internet. For example when using Yahoo, Gmail, Hotmail, Facebook, and Twitter. Data and applications needed run elsewhere (in a company) through an internet connection.

The ability to speak is the ability to speak the sounds of words to express, express, convey thoughts, ideas and feelings (Arsyad Mukti, 1988: 17). Speaking ability is the ability to use intonation, speech and compose sentences well in each conversation.

Speaking skills require a minimum understanding of the speaker in forming a sentence. Speaking skills are essentially the skill of producing the flow of an articulation sound system to convey the will, feelings and desires to others.

Someone is considered to have the ability to speak if he is able to communicate with his interlocutors. The speaking learning strategy refers to the principle of response stimulus as long as these two variables are controlled by the speaker, then he can be categorized as having the ability to speak. The speaking skills teaching program must provide opportunities for each individual to achieve the goals he aspires to.

In learning English, it will not be separated from the term speaking skill. Grauberg (1997) revealed that many students consider the main purpose of learning a language to be able to speak the language. Therefore, Grauberg continues, language teachers must help students to achieve these goals by releasing all the best abilities.

II. METHOD

This study uses a descriptive method approach or with qualitative naturalistic words that explain the state of the field that occurs naturally (natural).

III. RESULT

1) Learning Planning

In cloud learning planning is categorized into learning media. Planning is a way to make an activity run smoothly, accompanied by various anticipatory steps to minimize existing gaps and achieve predetermined goals. Planning is the result of the process of thinking and assessment and selection from various alternatives that are considered to have more value for effectiveness and efficiency, which is the beginning of all the processes of implementing rational activities.

Planning is the process of determining and utilizing resources in an integrated manner which is expected to support activities and efforts that will be carried out efficiently and effectively in achieving the objectives. In this case, Roger A. Kaufman (Harjanto 1997: 2) suggests that "Planning is a projection (estimate) of what is needed in order to achieve valid and valuable goals. Planning is often also referred to as a bridge that connects gaps or gaps between present and expected conditions in the future. Thus, planning is related to determining what will be done.

2) Learning Implementation with cloud

The use of cloud in the implementation of learning is found in the core and closing activities. Cloud is used as one

of the learning media that can facilitate teachers and help teachers streamline the time given.

Learning is a process of teaching and learning activities that also play a role in determining the success of student learning. From the learning process, there will be a reciprocal activity between the teacher and students to reach a better goal. This is in line with the opinion of Jogiyanto (2007: 12) who said that learning as a process in which an activity originates or changes through the reaction of a situation faced and the characteristics of the change in activity can be explained based on reaction tendencies, maturity or change temporary changes.

In the implementation of learning by using the cloud adjusted between the characteristics of cloud use and the characteristics of students. The use of cloud can make students learn independently and search for learning resources. Educating learning is an effort to provide environmental conditions that can stimulate children to do learning activities. The main purpose of learning is to educate students to be responsible individuals. There are 4 learning pillars that are used as a reference, namely learning how to know, learning how to do, learning how to be and learning how to life together. The use of cloud can help in achieving these 4 pillars.

3) Assessment of Learning

In learning assessment, cloud is used for self-assessment, assignment assessment and portfolio assessment.

Authentic assessment is a comprehensive assessment conducted to assess input, process and output of learning, which includes the domain of attitudes, knowledge, and skills. Authentic assessment assesses the readiness of students, as well as the process and learning outcomes as a whole.

Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 104 of 2014 concerning Guidelines for Assessment of Learning Outcomes by Educators. Scope of assessment of learning outcomes by teachers includes competencies in attitudes, knowledge and skills.

Indicators of achievement of skills competencies are characteristics, characteristics or processes that contribute to / show achievement of a certain basic competency which is a reference for assessment of subjects.

In curriculum 2013, the assessment of processes that are carried out through observation and reflection must be aimed

at improving the learning program and improving the quality of service to students. This needs to be done to encourage continuous quality improvement, so that it can foster a learning culture as well as a work culture to make today better than yesterday and tomorrow must be better than today [6].

IV. CONCLUSION

- 1) In implementation, the cloud is categorized as a learning medium that will help teachers and students in the teaching and learning process
- 2) The use of cloud computing can be used in core activities and closing activities. By utilizing cloud computing technology can help students in the learning process and make the learning process in class to be fun. At the core activity, the use of cloud becomes a tool or media that helps teachers and students to achieve the expected learning goals. With cloud students can repeat which parts are not clear according to the needs of each student, so that differences in student ability levels can be overcome. In the closing activity, the use of cloud can help teachers and students to provide conclusions in more detail and each student has the opportunity to present his conclusions.
- 3) In the attitude competency assessment, the use of cloud can help the teacher more closely see the development of students' attitudes from how students carry out their tasks well in accordance with the instructions the teacher has given, accuracy in collecting assignments. In knowledge competency, the use of cloud can help teachers to be more observant of the development of students' knowledge one by one. Skill assessment, cloud use can help teachers see the extent to which students are able to develop knowledge that has been given and implemented.

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