Implementation of Information and Communication Technology on Reading Ability of Students in Higher Education

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Abstract. This article discusses the implementation of information and communication technology on the reading ability of students in tertiary institutions. The method for collecting data sources uses quantitative descriptive methods. This method presents data and describes data based on books, journals, and several other sources. This article examines and presents information and communication technology in the reading ability of students in tertiary institutions, including input competency for higher education is very necessary, as a form of higher education readiness in maintaining graduate quality. Curriculum development in tertiary institutions should continue to be reconstructed against changes that occur, especially the ability to receive information and disseminate it to the public. Interest in reading and ICT will be achieved in national education standards in Indonesia, which will be a solution to the problem of information delays and will continue to be minimized.

Keywords: ICT, Reading Ability, Higher Education

INTRODUCTION

Technology has led people to live easier with different goals. The purpose of creating technology is to facilitate human life so that what is desired will be easier to achieve. In other aspects, (Helaludin 2019) says that technology also has a very significant influence on the ability of the community at large to receive information and communication on communication media. This influence can come from the information received and information made based on the author's observations, experiences and understanding. (Sutanto 2011) said in his writing that the ability to read is not only needed in college, but also needed when they are working. Therefore, they need a stimulus that it makes students interested in reading. In the words that (Ergado 2019) said that one way to introduce science and technology is by reading as much as possible from science, history, bibliography, and some other books. But in the fact today that the implementation of the ICT in reading progresses still is unpredictable, the data appears the World Bank report No 16369-IND and the IEA study (International Association for the Evaluation of Education Achievement) in Southeast Asia that the lowest level of children's reading is held by Indonesia with a score of 51.7 behind the Philippines (score 52.6); Thailand (score 65.1) Suyatno in Sutikno (2006: 93) states that the ability of Indonesian children to master reading materials is low, only 30 percent (Siswati 2010).

In this aspect, observation is also able to provide information that could be true, but also could be wrong. This is based on one's own weakness and ability to make observations (Kocaarslan 2016). Experience is also a source of information that a person conveys to others, but with sources of events or conditions that have never happened at a certain time (Sulistiyarini dan Sabirin 2020). Understanding is also a more specialized source of information with literature sources that are more objective with a scientific approach (Zagami et al. 2018). Observation, experience and understanding are frameworks that may be very authentic to sources of information.

A person's ability to read traditionally makes it possible to obtain information from the material being read for longer in one's brain, but someone takes a long time to save it (Sarfo et al. 2020). This will be different if someone uses ICT as a way or medium to obtain information from reading material in a shorter time, but more effectively in developing information (Ergado 2019; Zagami et al. 2018). For students, observation, experience and understanding are indispensable for cognitive, affective and psychomotor processes in receiving information from outside the classroom and from inside the classroom. According to (Ratminingsih, Budasi, dan Kurnia 2020) this ability is of course very necessary in finding sources of knowledge and sources of knowledge. However, in the conditions of campus life, (Basani.CH 2019) students are less productive and active in seeking and finding sources of knowledge information necessary for life in the community.

The problem today is that students' reading skills are emphasized on memory skills rather than the ability to understand and understand what is being read. This kind of ability will be more easily lost from the memory of a reader but used for a shorter time. This is of course a gap between the desire for literacy abilities of the 21st century. (Helaludin 2019) stated in his article that there are

abilities that a person must have in facing the 21st century, namely basic literacy skills, competencies and character, of course basic literacy includes literacy, numeric literacy, scientific literacy, digital literacy, financial literacy, cultural literacy, and civic literacy (Seifu 2020).

In this problem condition, the ability to read or the ability to process the information received or information disseminated to the public needs to be filtered from true or incorrect information. Based on (Siswati 2010) this ability can only be obtained from the seriousness of a student in reading scientific books, asking questions, discussing, reviewing books, and having a dialogue with experts in their fields. This allows the competency of graduates from higher education to be able to provide updated and up to date information. And therefore, when this can be implemented to students in a programmed and integrated manner, the aspirations of a nation to educate the nation's life will be achieved.

RESEARCH METHOD

Descriptive method is a method used to study and find various things about the topics discussed. According to (Uin dan Kalijaga 2019) This method is a method that takes data sources from various sources of reading books, journals, reference books, discussions with experts in their fields, and the data is described based on the information obtained. This study uses a qualitative approach. The main requirement in this qualitative approach, the key researcher is the researcher himself. The instrument of this study used observation, interviews, and documentation (Syamsudin 2014). All data will be analyzed by reducing data, presenting data, and drawing conclusions.

Observation is the initial action in seeing and problems and reconstructing past events with the intention of feeling understanding of a phenomenon. This observation is carried out as a manifestation of the initial activity in determining problems and finding solutions(Willis et al. 2019). Observations were made to students of the Faculty of Teacher Training and Education Universitas Asahan involving three study programs.

Interview is an act of seeking information on the problems studied by means of question and answer. Interviews were conducted with students in three study programs, Faculty of Teacher Training and Education, Universitas Asahan.

1. What competencies do you expect to be able to access multimedia-based technology (internet, facebook, What Up, and others)?
2. Is there any influence of the curriculum on the competence to access multimedia-based technology in universities?
3. What do you think about Technology, Information and Communication towards reading interest on Android (HP)?
4. Does Technology, Information and Communication (ICT) have an impact on student reading resources in higher education?
5. What kind of application of ICT do you think is appropriate for college students?

Documentation is supporting sheets of observations and interviews on problems. Documentation is taken from reputable sources of reference books, national and international journals (Yang 2017).

FINDING AND DISCUSSION

Based on the explanation that has been presented above, based on these points, several important things were obtained which became discussion points in this article, namely:

1. Higher Education Competence towards Graduates

Higher education institutions need to continue to improve themselves in ensuring the quality of graduates according to quality standards in the field (Sallis 2014). Of course, the quality standard in the field must begin in the input, process and output processes. The input process is understanding the initial conditions of the potential students' abilities (Helaludin 2019). So that, this knowledge is very important as a basic form of knowledge transformation that will be formed and given to prospective students. This is very much influenced by the so-called school environment. But, this point, we can know that the knowledge and science need to the reading processes towards of the students' competences.

To achieve the expected input, of course, the introduction to the school should be done at the central, regional and school levels. The approaches are taken certainly have an impact on input as a form of assimilation from one condition to another (Qodriyani, Aloysius, dan Suyanto 2020). In higher education quality standards for graduates based on the Indonesian curriculum qualification framework is to form competencies that are tailored to field competencies. This implies that teaching is a reflection of what exists in life and the environment.

2. High Education Curriculum

The curriculum used in higher education today refers to a competency-based curriculum (or we often call it CBC). Competence is a combination of knowledge, skills, values and attitudes that are reflected in habits of thinking and acting. According to Crunkilton in Mulyasa, he argued that competence is the mastery of a task, skills, attitudes and appreciation needed to support success. Competencies that must be mastered by students are stated in such a way that they can be assessed. But, the reality cases of the high education use the optional curriculum to implement of technology as the sources of learning. Therefore, as a form of student learning outcomes that refer to their learning creativity. Students need to know the learning objectives, and the levels of mastery that will be used as criteria for achievement explicitly developed based on predetermined goals that contribute to the competencies being studied. According to Gordon in Mulyasa (Ratminingsih, Budasi, dan Kurnia 2020), explaining several aspects or domains contained in the concept of competence as follows:

1. Knowledge (knowledge), namely awareness in the cognitive field, for example, a teacher knows how to identify learning needs, and how to carry out learning for students according to their needs;
2. Understanding (understanding), namely the depth of cognitive and affective owned by individuals;
3. Ability (skill) is something that is owned by an individual to perform a task or job that is assigned to him;

4. Attitude, namely (happy or not happy, like it or not) or a reaction to a stimulus that comes from outside;
5. Interest (interest) is a person's tendency to do something or a deed.

3. Students and Reading Interests

Lack of interest in reading in students can also be seen from student participation in class when attending lectures. The author finds many students who find it difficult and reluctant to ask questions about the material provided by the lecturer. Students tend to be silent and accept all the information provided by the lecturer. They rarely provide criticism, opinions or ideas (Siswati 2010). When the lecturer asks students why they don't want to ask questions, most students feel confused and unable to ask questions (afraid that the questions are not qualified). On the other hand, the quality of the questions can actually be traced to their reading. Students are unable to ask or give unqualified questions, possibly because they did not previously read about the material provided by the lecturer. According to Siregar (1996), as part of the academic community, students have an obligation to read. The higher education environment is a strategic place to develop reading habits.

Reading activities should be a daily routine activity for the scientific and academic community because their tasks require continuing reading activities. Learning, researching, writing, seminars and discussion activities require students to always read and obtain relevant and up-to-date knowledge and information so that the quality of their learning outcomes continues to increase(Tsuei, Huang, dan Cheng 2020). Apart from that, reading activities also have a social function, namely to obtain certain qualifications called achievement reading.

Students, in order to pass education well, must study and read a number of reading materials, especially those recommended by the lecturer. Students as human resources in Indonesia need their ideas and opinions to develop this country. According to (Yang 2017) the quality of human resources is closely related to the students' interest in reading. Reading habits are not only related to the teaching and learning process but can also shape individual personalities by appreciating the results of their reading. As a result of this reading habit, Singapore and Malaysia according to the Human Development Index (HDI) 2004 report, from 175 countries, Singapore's education level is in 25th place and Malaysia is at 58th. Meanwhile, Indonesia's education level is ranked 111 out of 175 countries. Meanwhile, the quality of Indonesian people is much lower than Brunei (33), Thailand (76), and the Philippines (83), even lower than "underdeveloped" countries such as Kyrgyzstan (110), Guinea-Equatorial (109), and Algeria (108).). Besides, the quality of Indonesian higher education is also lagging behind that of neighboring countries.

When viewed from the 2006 Times Higher Education Supplement (THES) survey, Indonesian universities have only entered the 250th row represented by the University of Indonesia, this quality is below the achievements of the Malaysian National University (UKM) which ranks 185. Then in 2007 according to the THES survey out of 3000 universities in the world, ITB just managed to rank 927 and at the same time became the best university in Indonesia.

4. Technology as a Reading's Source

The presence of information and communication technology (ICT) essentially aims to improve the civilization of human life. In this case, all the surrounding aspects will be affected by the presence of ICT (Tsuei, Huang, dan Cheng 2020). Before penetrating the education sector, ICT has also influenced various aspects of the economy. This is increasingly evident in entering the free-market era, especially in welcoming the ASEAN Economic Community (AEC). This condition will certainly change the paradigm of developing countries in their development strategy, from industrial development to the information age (Bartolomeus Samho, SS, M.Pd Oscar Yasunari, SS dan LEMBAGA 2013). In fact, the technology as a reading's sources still is limited by some factors such as human sources, facility supports, income souurces, and implementation policy. Therefore, technology, information, and communication must be supported by the whole components to looking for the knowledge and science to the next day.

Turning to the world of education, the application of technology to education and learning is one form of innovation. Innovation is carried out to keep pace with the times. Another consideration behind this is the factor of students who have far different characteristics when compared to before (Sulistiyarini dan Sabirin 2020). The millennial generation and generation Z are unique and different individuals who must be handled uniquely in their education process. Nowadays, students are no longer interested in the teacher-centred learning process. They are more interested in something new with a process-oriented discovery of their own. This process is better known as the student-centred learning-based learning approach.

But the problem is, not everyone responds well to the existence of information and communication technology. Some educators still consider ICT as something that does not play an important role in education (Yamin dan Syahrir 2020). This is certainly not in line with the duties of the teaching profession which must adapt to the times. Although we understand together that ICT cannot shift the vital function of educators in learning, the presence of ICT is, however, the presence of ICT should be used maximally in achieving educational and learning goals. A study shows that there is a level of the digital divide that occurs in teachers at the junior high school level. The gap is caused by the capability factor in the use of technological tools for these teachers, most of whom have not mastered them well (Zulham, 2014).

CONCLUSION

Based on the necessary points above, it can be concluded that the implementation of students' reading skills at the tertiary level towards information and communication technology has several points, including 1) universities must pay attention to the input of prospective students who will receive the teaching and education process. The teaching and education process is the right for students to face the phenomena that are happening. 2) The development of the curriculum in higher education needs to be paid attention to the ability component by data, providing information, and sharing information with the public. 3) Technology as a source of reading must be used as a companion in processing information and

sharing information on scientific sources. 4) Interest in reading in tertiary institutions, of course, must be pursued by all elements of the teaching staff, lecturers, and students to keep the information from various sources behind.

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