RESEARCH ARTICLE

AN ANALYSIS OF ICT IMPLEMENTATION IN THE LEARNING PROCESS AT THE ISLAMIC BOARDING SCHOOL OF NURUL HARAMAIN NW NARMADA WEST LOMBOK REGENCY

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ABSTRACT

The purpose of this study is to analysis of ICT implementation in the learning process at the islamic boarding school of Nurul Haramain NW Narmada West Lombok Regency. This research method are mix methods with sequential exploratory design. This model involves the collection and analysis of qualitative data in the first stage, followed by the collection and analysis of quantitative data in the second stage. The results of this study are; (1) Learning planning by utilizing ICT-based learning media runs maximally because 78% of students answer that teachers very often utilize ICT-based learning media; (2) the implementation of learning has been going well because of the questionnaire implementation of learning there are 75% of students recognize that teachers implement learning in accordance with what is planned; (3) there were 76% of students admitted that the teacher had conducted an ICT-based learning evaluation that could lead to learning motivation and Fiqh learning outcomes where the average student score was 82 higher than the KKM score of 75; (4) Some obstacles faced by teachers in ICT-based learning are; (1) teachers have difficulty making features that can increase students' active participation; (2) lack of knowledge of teachers in the operation of macromedia flash and other interactive multimedia software. while the supporting factors are; (1) there is internal coaching but not yet optimal; (2) availability of adequate ICT-based learning facilities. Based on the results, this study offers some recommendations, namely; (1) To improve the quality of lesson planning to maximize through expert guidance or experts, panelists and others through discussion and preparation of learning tools together (team teaching); (2) To improve the process of learning implementation, teachers must adapt to the implementation plan of learning that has been made; (3) To improve the quality of the assessment, teachers should use various assessment instruments that measure what they want to measure; (4) To overcome the obstacles of learning should be done more intensive internal coaching both on aspects of the development of hard skills and soft skills of teachers.

INTRODUCTION

Islamic boarding schools (known as Pesantren in Indonesian language) are generally recognized as an educational institution privately administered and managed by the centralitic sort of religious figure, known as Kyai (Islamic cleric) with Islamic education background. Such religious identities become the impetus of public to send their offsprings to gain education in Pesantren. Generally, boarding system becomes the central characteristic of Pesantren, and in practice, there are some differences between Pesantren and general or ordinary schools, namely their characteristics, objectives and curriculum. Pesantren to date is often adhered to adopt the obsolete teaching system. However, Pesantren nowadays step forward more quickly regarding the notion of independence, in which they are offering students activities and skill training development (Madjid: 2010, xviii). Such an idea shows that Pesantren repond to the changes and transforms their institution from the old-fashioned to modern ones (Madjid: 2010, xviii). The transformation of Pesantren does not mean to abonden their distinctive characteristic as an Islamic education, instead corresponds to the needs of students and modernization. Nurul Haramain Islamic boarding school, where this research took place, in its early periods, used to implement learning activities comprising Islamic values and the study of classical Islamic books (known as Kitab Kuning in Indonesian language). The students gain Islamic education through the learning system led by an Islamic cleric. In addition, the subjects in the school are integrated with the national subjects. The attempt to marry the Islamic values and general lessons remains the great challenge

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in the school. Recently, the educational paradigm has shifted from teacher centered to learner-centered learning. Such a shift requires the provision of learning facilities that afford students the opportunity to learn more independently. The development of Information and Information and Communication Technologies (ICTs henceforth) to date can be a vehicle for the successful implementation of such a notion of individual learning. Technologies are integral parts of every individual that needs information. Technologies can facilitate learner-centered activities leading to social life and quality. The ditigal world experiences rapid changes and the role of ICTs plays more important role within years and years to come. This accords with what Amin advocates that the use of ICTs in the teaching and learning process may enhance students' accessibility to resources and quality education and their motivation (Noor-Ul-Amin). The attempt to integrate Islamic values in Nurul Haramain Islamic boarding school is continuously made and initiated by *Mudabbir* (male teacher assistant*)* and M*udabbiroh* (female techer assistant), Islamic teachers, Islamic cleric and teachers in the Islamic school. To this end, the students are expected to be able to cope with the general subjects and moral traits.The modernization accelerates the dramatic transformation in Islamic boarding schools, including the making use of ICTs. ICTs play pivotal roles in the development of education system. The employement of ICTs in schooling context escalates significantly (Nilgün: 2011, 223-231). This indicates that the application of ICTs in classrooms remains essential. The implementation of ICTs benefits not only the teachers but also every individual in the schools. The transformation into the use of ICTs in Pesantren significantly results in the increase number of students entering the schools. However, the inadequacy of ICTs facilities turns out the inffective use of ICTs by the teachers and students. As a remedy, the Islamic boarding school provides subsidies for the procurement of laptops for the teachers. Another problem regarding the application of ICTs is the incompetent human resources reliable for the operation of computers. Some teachers are able to operate *Microsoft office*, yet many are unable to use website design, *corel draw*, *photoshop* and etc. Such situation requires the teachers and staffs to develop their skills in using ICTs. The problems hamper teachers' creativity to achieve the learning objectives. Computers can be one of the learning resources. Learning resources change rapidly from time to time as a response to the modernization. Such rapid changes require the transformation in terms of instructional methods, media, strategies and techniques for learning as primary needs of education. The following picture illustrates the changes of learning resources time from time to
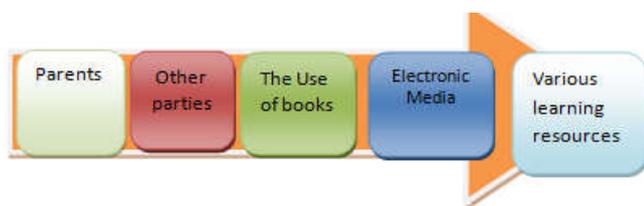
Picture: The shift of learning resources over periods of time

Information technologies involve anything pertinent to the process, props, manipulation, and information management. On the other hand, technology information is anything related to the use of props for the purpose of processing and transferring data from certain realm to another. ICTs are any electronic devices comprising of handware and software, and anything regarding the pcocess, manipulation, management and transfer of information across media (Rusman, etc: 2013, 87). In addition to that, Munir defines computers as an advancement of shopisticated multimedia technologies that are central to the today's lives and future (Munir: 2013, 162). The management and distributon of information from one communication networking provide a wider access to every angle of human life—computers allow students to study at their own pace and ability, support their understanding of materials (Rusman: 2013, 190). Computers allow the combination of collors, music, and graphic animation, including creating the animated simulation as one of the learning media. Along with the development is the thriving use of jargons starting with the letter *e*, such as *e-book, e-learning, e-laboratory, e-education,* and *e-library.* Drawing on the above descriptions, it can be concluded that learning resources are anything, including things, tools, humans and other parties that may provide information for students, and which may better their attitude. The material development remains a central part of instructors' professionalism because every learning requires learning resources that may transform the instructional process. The principles of material development proposed by Sitepu include the foundation of development, its objectives, and its components (Sitepu: 2014, 179). In doing so, the teachers can adapt the learning materials in accordance with students' needs.

METERIALS AND METHODS

This research is a research of mix methods with sequential exploratory design model. This model involves the collection and analysis of qualitative data in the first stage, followed by the collection and analysis of quantitative data in the second stage. By way of obtaining it, the data can be grouped into two kinds, namely primary data and secondary data. Primary data is data collected, processed and presented by researchers obtained and collected directly from informants through observation, field notes and interviews and questionnaires. While the secondary data outside the primary data in this case in the form of a written script or document. Data collection techniques were conducted with participant observation, interviews, documentation and questionnaires. Steps of data analysis is done by data presentation, data reduction, categorization, sintesisasi and preparing work hypothesis. As for analyzing quantitative data is done with descriptive statistics

DISCUSSION

Analysis of Planning ICT in Learning process

Learning planning as the process of preparation of learning materials, the use of instructional media, the use of methods and approaches of teaching and assessment in a time allocation that will be implemented at a certain time to achieve the goals set. Aqib and Rohmanto also pointed out that the lesson planning is the teacher's initial thoughts before managing the learning process (Aqib & Rohmanto, 2007: 53). Strategic planning affects the performance of teachers in implementing learning. Planning learning mapping many things, among others, is a teacher first analyze the content of SK, KD which is then integrated in the learning objectives. Similarly, in the planning of learning, teachers are required to be able to

develop the material, solve the breadth and depth of the material, adjust the allocation of time, convey the analogies that can not be separated from contextual facts with systematic learning structures are all contained in the syllabus of learning. The quality of planning that teachers need to be an effective teacher is to understand the learning content, the understanding makes it easier for the teacher to present the lesson, the understanding of the subject matter is part of the instructional goal that takes a lot of time and energy to plan. Based on the questionnaire, the lesson planning given to the students gives an illustration that the practice of learning planning especially in the learning of Fiqh in Pondok Pesantren Nurul Haramain NW Narmada based on ICT goes according to the Teacher Implementation Plan. There are 78% of students answered very often. This means that teachers do lesson planning by utilizing high ICT-based learning media.

An analysis Implementation of ICT in Learning process

Implementation of effective learning requires learning strategies to communicate and support the learning process. Joyce and Weil stated that: "Models of teaching are really models of learning. As we help the students how to learn (Supiana, 2010: 41) ". The statement explains that the learning model helps learners to gain information, ideas, skills, ways of thinking and expressing themselves. In addition to training, as much as possible teachers build relationships with learners and consider the actions undertaken in learning. Each learner has its own problems in learning. the task of teachers to recognize the weaknesses, advantages, and needs of each. This is a challenge for teachers. proximity of teachers with learners opens opportunities for teachers to accommodate their differences in the instruction they conceive, so that the needs of learners while delivering the material and improvise in learning maximally. Submission of information clearly and create focus on learners is one of the characteristics of learning success. The teacher realizes that the class is something dynamic and complex composed of many personalities. This understanding contributes to teacher interaction with learners, plans in managing learning practices, and prepares differences for learners' learning needs, so teachers need knowledge of multimethods and multiactions in order to accommodate differences among learners. Some measurable indicators in learning implementation variables are in accordance with the learning steps. Among them are Apersepsi, observation, suitability of learning steps according to RPP, Applying methods and media, Contextual learning materials by analyzing the material first, reinforcement, and Formulating conclusions

The Graphic below presented about the implementation of learning at boarding school of Nurul Haramain

Implementation of learning at Nurul Haramain Islamic Boarding School NW Narmada based on ICT is implemented with every learning, including learning fiqh. Based on the results of questionnaire data analysis of the learning implementation can be described that 75% of students answered very often, meaning that most students admitted that many teachers use ICT-based learning media.

Evaluation of ICT Implementation in Learning process

Assessment is an effort to know the quality of learning. Assessment in thematic-integrative learning is conducted to assess the achievement of objectives and indicators of the lessons learned. Assessment in this case is no longer integrated but separated between subjects in accordance with basic competencies, learning outcomes and indicators. Important assessment is done to obtain information about the progress of learners in learning (Trianto, 2010: 254). The assessment is based on aspects to be assessed in terms of cognitive, affective and psychomotor aspects. Assessment is all the way to obtain data about an individual. To assess the achievement of learners, teachers provide tasks, daily tests, mid semester and next semester analyze the information from the results of the data and measure achievement in learning. the achievement of learners is not always indicated by the results of the test alone but also shown through the observation or self-report of learners. important assessment principles are accurate, economical, and encourage the quality of learning The assessment system by the teacher is a scoring system that aims to improve or follow up on the learning outcomes through the elaboration of subject matter from basic competencies. Mardapi stated that the teacher's assessment covers all aspects of both cognitive, affective and psychomotor aspects (Mardapi, 2012: 12-15). The cognitive aspect assesses knowledge, understanding, application, synthesis and analysis. The affective aspect is assessed through observation and questionnaire while the psychomotor aspects include the precision of the movement by the learners.

The results of the assessment in the lesson become the reflection of the teacher taking action, reflecting the learner's activities, the implementation and the assessment. The results of the assessment become teacher guidance to determine the next action, provide review or repeat the material According to Permendikbud No. 66 of 2013 on educational assessment standards, that the assessment of education as a process of collecting and processing information to measure the achievement of student learning outcomes include: authentic assessment, self-assessment, portfolio-based assessment, repetition, daily examination, semester mid-term, level of competence, quality competency level test, national exam, and school / madrasah exam. The selection of the appropriate test form is determined by the purpose of the test, the number of test participants, the time available to check the answer sheet, the material coverage, and the characteristics of the subject. The form of objective tests such as multiple choice, rightly wrong and others are used when the number of test takers is large and the range of material to be achieved is broad, while the non-objective test form is used to measure a person's ability in the social sciences because it requires more than one answer. So before determining the appropriate test form, the teacher first recognizes the characteristics of the subject and its scope. In conducting the evaluation of learning, teachers do many

things, among others, is to ask questions to assess students' attitudes to measure problem solving skills, assess student observation, assess ability to explain, formulate conclusions, carry out pre-tests and post-tests. While in the questionnaire evaluation of learning, there are 76% of students answered very often. This means, although at the stage of implementation is less than the maximum but at the planning stage is very good so that the evaluation of learning is also good. This is also in accordance with student learning outcomes in Fiqh subjects where the average score of students is 82 and higher than the KKM score set at 75.

The challenges for the application of ICTs in Nurul Haramain NW islamic boarding school narmada

The challenges confronted by the teachers in implementing ICT-based learning was to design a learning method that corresponded to the media used. In the past, the teachers did not begin with the material analysis prior to determining the appropriate method of learning. Many of the teachers also applied instructional methods that did not accord with the use of ICTs which prevented the attainment of the expected learning goals. Another barrier found was the supporting facilities. Generally, the internet access in the Islamic boarding school was relatively good, but the internet facilities were not yet evenly distributed to the entire boarding school environment. Similarly, other supporting facilities, such as Diesel generator that can optimize the application of ICTs, could not be completely procured. The headmaster of the Islamic boarding school opined that one of the primary barriers of the ICTs use in the school was the dearth of electicity capacity in that it did not accord with the usage, which was projected to be at ratio 1: 2, which means that it was deficient to about 50% power. The other constraint of ICTs use in the school was the lack of teachers' confidence. Many teachers assumed that using computers did not help students undertand the materials; hence, they remained resistant to change. In addition, another problem was the unavailability of adequate computer modules. The teachers were letdowned by the students who may be more skillful in using computers, so the boarding school suggested that the teachers not to be clueless and be up to date.

The sideliness of traditional values and the conservatism should be minimized within the context of education and development. Such a condition is also caused by the lack of support of the national government that results in the changes belonging to indvidiual domain. Particularly, in Nurul Haramain Islamic boarding school, the transformation was initiated by the school leader because of the absence of the government's supporing resources. Khan, Hasan and Clement advocated that *",,,lack of resources within educational institutions are another major hindrance to the implementation of ICT in a developing country"*. In fact, the dearth of resouces is the primary obstacle of the ICTs application in an education institution (Khan: 2012, 73). The students boarding in Nurul Haramain also faced some challenges. The use of ICTs made most of the students lazy to write, interpret and translate Kitab Kuning (Classical Islamic books). In addition, they were limited to access certain webs as a free access means they could be led to porn sites. For this reason, all teachers, school superintendents, and OSNH monitored the use of Internet in

the Islamic boarding school. Such a monitoring is also done by their parents.

Conclusion

Based on the results of research, it can be concluded as follows:

1. Learning planning by utilizing ICT-based learning media runs maximally because 78% of students answer that teachers very often utilize ICT-based learning media.
2. Implementation of learning is running well because of the learning questionnaire there are 75% of students recognize that teachers implement learning in accordance with what is planned.
3. There are 76% of students admitted that the teacher evaluates ICT-based learning that can lead to learning motivation and learning outcomes Fiqh increased where the average value of students is 82 higher than the KKM value of 75.
4. Some obstacles faced by teachers in ICT-based learning are; (1) teachers have difficulty making features that can increase students' active participation; (2) lack of knowledge of teachers in the operation of macromedia flash and other interactive multimedia software. while the supporting factors are; (1) there is internal coaching but not yet optimal; (2) availability of adequate ICT-based learning facilities.

Recommendation

Based on the research findings in the discussion chapters and conclusions presented earlier, then there are some suggestions that researchers can convey, namely:

1. To improve the quality of lesson planning to maximize through expert guidance or expert, panelist and others through discussion and preparation of learning tools together (team teaching).
2. To improve the process of implementation of learning, teachers must adapt to the implementation plan of learning that has been made.
3. To improve the quality of the assessment, teachers should use various assessment instruments that measure what they want to measure.
4. To overcome the obstacles of learning should be done more intensive internal coaching both on aspects of the development of hard skills and soft skills of teachers.

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