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# National assessment management based on information and communication technology and its effect on emotional intelligence learners

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**Abstract.** The implementation of information and communication technology in the MIN 1 Probolinggo, East Java, Indonesia, is expected to increase the effectiveness of the computer-based national assessment activities, even in the current era of globalization, information and communication technology is a fundamental requirement in delivering quality learning. Thus the management of education based on information and communication technology can significantly generate effectiveness and efficiency in learning. The effectiveness of the computer-based national assessment activities at MIN I Probolinggo, can significantly affect the management of education and become a model of education in the future, although psychologically many students do not understand the exam. Thus, through a management system developed by the principal of MIN 1 Probolinggo, it can give confidence to students. Besides that, the management of computer-based assessment can play an extraordinary role to support the learning process that is *active, constructive, collaborative, intentional, conversational, contextualized, and reflective*.

## 1. Introduction

At the level of reality, the development of science in the field of information and technology in the midst of society has undergone a number of significant changes, and one of the changes that affect education is the birth (information and communication technology) [1]. This view, gives various impacts on the order of social life, both positive and negative, but however the development is meant to be a necessity that must be faced. Thus the role of technology in various fields raises various demands, especially in the implementation of Islamic education. Therefore, the use of technology in



education is expected to improve the quality and competitiveness of students' graduates, so to achieve these objectives, management of information and communication technology is needed in the implementation of computer-based assessment in the MIN 1 Probolinggo, East Java, Indonesia.

The implementation of information and communication technology in the MIN 1 Probolinggo, East Java, Indonesia is expected to increase the effectiveness of the computer-based national assessment activities, even in the current era of globalization, information and communication technology is a fundamental requirement in determining the quality of learning. As Dryden and Vos [2] in the results of their research explained that, education that is considered successful is an education system that is proven to be able to build imagery and become a future education to arouse the passion of learning that is fun (*how student learn*). Thus one of the approaches and methods used to improve the quality of learning is to use information and communication technology.

Therefore, to achieve the intended purpose, a management system is needed in the intended activity [3]. Thus the portrait of the implementation of the computer-based national assessment activities in MIN 1 Probolinggo, is seen as the national examination activity which was first held using a computer system, this implementation process significantly impacts on emotional intelligence for students, even though managerial activities are considered to be less optimal. Thus this research activity, aims to describe these activities, as an effort to find out the ability and emotional intelligence of students in facing the computer-based national assessment activities in Islamic education institutions at the primary school level, especially in MIN 1 Probolinggo.

## 2. Perspective Theory

Universally, information and communication technology in Islamic education today, becomes an important part to improve the effectiveness of Islamic education activities, especially in the implementation of computer-based national assessment activities at MIN 1 Probolinggo. Thus the model of the implementation of the computer-based national assessment activities referred to, is seen as a fundamental change in the dynamics of the implementation of the national assessment in MIN 1 Probolinggo, even seen as a strategic step in improving the quality of learning. Therefore, these activities must be supported by a variety of appropriate and strategic policies on the utilization of information and communication technologies through a good management system [4]. In this context, according to Ardoni explained in the Dictionary of computers information processing and telecommunications, so that understanding technology and information can be understood as the technology of procuring, processing, storing and disseminating various types of information by utilizing computers, as a process for creating various information management [5], based on a good value and aesthetic management system [6].

Thus, information and communication technology is a concept that cannot be separated between the two, and even has a very broad understanding, and is not only understood as management related to processing, management, transfer of information between media, and not just software, but includes a combination of knowledge, methods and techniques for using information in Islamic education organizations [7]. In other aspects, the use of the information and communication technology system in the context of Islamic education aims to provide convenience in accessing and conveying various information that has been prepared in digital form that has been taken from various management information sources, so as to create effectiveness and efficiency in various organizational sectors Islamic education [8].

Management of information and communication technology, in general can have advantages, namely the availability of broad and fast information, as well as appropriate in the learning process and the implementation of computer-based national assessment activities [9]. The Government through the Ministry of National Education can also respond to the above conditions and the existence of this information era by formulating policies to increase access, efficiency, effectiveness and quality of graduates of education, with the implementation of information and communication technology in each educational institution [10]. Even the direction of implementing ICT has been formulated by the Information and Communication Technology Council, based on the results of Presidential Decree No. 20, year 2006 dated November 11, 2006, and covers general policies and strategic directions for national development through ICT information and general objectives to prepare Indonesian society

based on knowledge and technology by 2025 [6]. This view, as has also been explained by UNESCO by identifying four stages of information and communication technology, namely: 1) emerging processes; through educators and education personnel, he began to realize to carry out the process of procuring facilities and infrastructure, 2) applying; educational institutions must have a new understanding of the contribution of Information and communication technology and use it in every learning, 3) the infusing stage; namely a model for integrating curriculum with Information and communication technology so that learning activities can become productive and professional (facilitating learning), 4) transforming stages; that is, educational institutions have utilized ICT in organizations, educators and education personnel can create ICT-based learning environments that are integrated and learning environment [11].

### **3. Research Method**

This study uses a qualitative approach with case study. The researcher tries to describe and analyze about national assessment management based on information and communication technology and its effect on emotional intelligence learners at MIN 1 Probolinggo, East Java, Indonesia. The data collection techniques are carried out through deep interviews, observation participation, and documentation and focus group discussions.

### **4. Research Result**

The results showed that, MIN 1 Probolinggo is one of the first elementary school level educational institutions using the computer-based national assessment activities in the 2017 Academic Year -2018, and became a pilot model for several primary schools in the area of Probolinggo regency. These activities are considered quite effective, because based on the results of the study, the implementation of the exam uses a strategic management system, namely all forms of activities are carried out through planning, organizing, implementing and evaluating [12] in accordance with predetermined standards [13]. The effectiveness of the computer-based national assessment activities at MIN I Probolinggo, can significantly affect the management of education and become a model of education in the future, although psychologically many students do not understand the exam. Thus, through a management system developed by the principal of MIN 1 Probolinggo, it can give confidence to students. Besides that, the management of computer-based assessment can play an extraordinary role to support the learning process that is active, constructive, collaborative, intentional, conversational, contextualized, and reflective.

Theoretically active learning process; allows students to be actively involved in learning activities. While constructive learning models; allows students to incorporate new ideas into previously possessed knowledge to understand the meaning, desires and doubts that have been in their minds. While collaborative in learning enables students in a group or community to work together, share ideas or experiences, advise their fellow group members. Intentional; allows students to actively and enthusiastically try to achieve the desired goals. In other aspects, conversational; in learning activities allow the learning process inherently is a social and dialogical process in which students benefit from the communication process both inside and outside of school. Contextualized; enabling learning situations to be directed to a more meaningful learning process (real-world) through a problem-based or case-based learning approach. Reflective; namely allowing students to be aware of what they have learned and reflect on what they have learned as part of the learning process [12].

In this context, learning activities based on information and communication technology enable the learning process to run interactively and simulative so as to enable students actively. Besides, it is also possible to practice higher-order thinking skills such as problem solving and indirectly improve ICT, especially in the implementation of computer-based national assessment activities at MIN 1 Probolinggo.

### **5. Conclusion**

The implementation of information and communication technology in the MIN 1 Probolinggo, East Java, Indonesia is expected to increase the effectiveness of the computer-based national assessment activities, even in the current era of globalization, information and communication technology is a

fundamental requirement in delivering quality learning. Thus the management of education based on information and communication technology can significantly generate effectiveness and efficiency in learning.

The effectiveness of the computer-based national assessment activities at MIN I Probolinggo, can significantly affect the management of education and become a model of education in the future, although psychologically many students do not understand the exam. Thus, through a management system developed by the principal of MIN 1 Probolinggo, it can give confidence to students. Besides that, the management of computer-based assessment can play an extraordinary role to support the learning process that is active, constructive, collaborative, intentional, conversational, contextualized, and reflective.

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