Monitoring Model and Evaluation of ICT Utilization in The New Normal Era in Distance Learning in Madrasah

Ibnu Salman[1], Priskila Issak Benyamin[2], Wartoni[3]
{ibnusalman81@kemenag.go.id[1], priskilaissakbenyamin@gmail.com[2], tonilpmp@gmail.com[3]}

Balai Litbang Agama Jakarta[1], Sekolah Tinggi Teologi Bethel[2], Lembaga Penjaminan Mutu Pendidikan Prov. Banten[3]

Abstract. Entering a new normality or better known as new normal makes all people have to be brave and care about the health aspects as an antipathy step or an adaptation to the Covid 19 pandemic that is still ongoing without exception those who are involved in the field of Education. Many teachers are stuttered and forced to use various online distance learning tools, ranging from Google classes, Webinars through Zoom, Google Meet, Hang Out, Microsoft Teams, and WebEx. This paper presents the results of monitoring and evaluating the use of ICT in Madrasah. This study uses a descriptive qualitative method consisting of learning documentation, observation, and in-depth interviews with the use of ICT in Madrasah. The results of the study revealed that the use of ICT by teachers in madrasah was used to search material, download material, use email, practice tests online, use of google classroom, and webinars using the Zoom application, whereas the use of ICT to students was more in the form of assignments to students making videos, uploads school work using social media accounts (facebook, Instagram, twitter), use of the Quiper e-learning application, and QR Barcodes. the main problem is that networking is sometimes difficult to obtain and many students are even more literate in using online applications than the teacher himself.

Keywords: Monitoring, Evaluation, ICT, Madrasah

1. Introduction

Information and communication technology (ICT) in the present context has experienced rapid development and caused a number of major changes in society. Rapid development makes us dependent on technology products because of the conveniences offered. The development of ICT indirectly forces the world of education to be able to adjust to the development of ICT itself. Marshal Mcluhan as quoted by Miarso (2011: 491) reveals how the medium, or the process of electrical technology in our time, shapes and rearranges the patterns of social interdependence and all aspects of personal human life. ICT has forced us to reconsider and reassess almost all thoughts, actions, and all institutions that had previously been considered established.

ICT has now become a major need for everyone, especially during the pandemic season that hit Indonesia, as revealed by (Rasmitadila et al., 2020) the need for ICT is a prerequisite for the success of online education. It was impossible to get proper education process in pandemic era. Even a year before pandemic, a research proved that teachers needed an extra hard effort to design the learning

process so that students are interested in participating in teaching and learning activities (Ariawan, 2020). However, Rusman, Kurniawan, & Riyana (2012: 1) state that global demands require the world of education to always adjust technological developments to efforts to improve the quality of education, especially adjusting their use for education in the learning process. ICT is very close to everything related to electronic-based tools. Information and communication technology is a study to make communication processes effective with the help of technology. This means that technology can make it easy to communicate and interact with everyone. When this is applied in the learning process it will bring convenience in terms of communicating or more precisely to convey learning material. ICT-based learning requires a change of paradigm and concepts in the learning and teaching process. At present the conception that teachers are the main source of knowledge must be eliminated. Teachers of educational institutions must adjust to the demands of the times. Teachers should be able to awaken students' potential and abilities.

Monitoring and evaluation of the use of ICT carried out in mid-March to May 2020 on the factor of weak mastery of distance learning (PJJ) of ICT products makes its own obstacles for each teacher. Even though there is already a Minister of National Education Indonesian Regulation number 16 of 2007 concerning Academic Qualification Standards and Teacher Competencies. In addition, the demands of learning in the new normal era force everyone without exception, a teacher must be able to use digital technology as a medium of learning. This is also the case as a teacher needs to master pedagogical, personal, social and professional competencies. In pedagogical competence, a teacher must be able to utilize ICT for the benefit of learning management, while in professional competence, a teacher must be able to utilize ICT to communicate and develop sustainable professionalism. In this regard, teachers must be able to plan, create, and monitor and evaluate learning by utilizing and integrating ICT in learning. In addition, ideally teachers can further explore the learning process by using ICT facilities in schools.

Several studies related to the mastery, utilization, and problems of ICT by teachers have been carried out, among others: (Astini, 2020) mention that based on the survey results stated that 50% of students have not having a laptop, as many as 80% of students stated difficult to get a signal and wasteful of data packet usage this is because many students live far away from urban areas. Lectures are deemed ineffective because as many as 61.5% of students said they had not never used online lecture media before the covid-19 pandemic.

The results of the 2017 Jakarta Institute of Religion Research and Development Institute show that the ICT utilization index to improve the quality of learning in Jakarta and West Java in general is quite high. The lowest utilization of ICTs by teachers is in the aspects of learning in the classroom. Whereas the highest is the use of school administration and organization (Education Team, 2017). Specifically, even the survey findings reveal the most rare or low Utilization of ICT is to make reports on student development to parents (2.71) and graphs of student development (2.72) and to make digital material (2.77). From these findings indirectly aspects of learning have not been explored optimally by the survey target teachers. Therefore, further research is needed to find out the use of ICTs in the learning aspect.

2. Research Methods

The approach used in this research is a qualitative approach. A qualitative approach is used because this research aims to analyze a particular phenomenon, which is done by describing the research objectives that have been determined. Qualitative research is used to explore data on how the use of ICTs in learning at Madrasah Aliyah in the city of Bandung, including inhibiting factors in its use, so that it implies an increase in the distance learning process undertaken. Data collection techniques in this study. The first documentary study, number two observations, in this study, researchers used non-participant observation types that were researchers outside the subject being observed and did not participate in the activities they were doing. Researchers will be more free to observe the emergence of behavior that occurs. Third, in-depth interviews. In this study used in-depth interviews (indepth interview) to key informants who are directly involved in the process of organizing the program. The logic model component consists of input, process, and product, the input component includes students, teachers and learning devices, the process component includes learning, environmental situations, and institutional support, while the product component includes how students and teachers are able to use learning tools during the pandemic. so that the use of ICT can have a significant impact on the expected learning process.

3. Findings and Discussion

Monitoring and Evaluation of ICT Infrastructure in Madrasah Aliyah Negeri 2 (MAN 2) Bandung City. From the results of monitoring and evaluation of the implementation of distance learning, it is known that MAN 2 Kota Bandung has run the concept of distance learning to the maximum, even to anticipate students from middle to lower economic status, the MAN 2 Bandung has distributed a number of 230 smartphone assistance to be able to used for students during PJJ, although there are other obstacles, which are still limited quotas for lower economic students. The findings of this study reinforce the opinion (Amini & Oluyide, 2020) that the use of ICT among students of MAN 2 Bandung is in accordance with their competence, so this allows monitoring and evaluation using a logic model.

Based on monitoring, facilities and infrastructure to support all subjects in MAN 2 Kota Bandung include: cctv, infocus/projectors, laptops, computers, internet/wifi networks, multimedia, and supporting infrastructure. According to the vice principal of MAN 2 Bandung Ikeu Kartika explained that "In every class, there is already a projector for IT-based learning", this program, is a form of madrasa sincerity in encouraging quality and educational services in MAN 2 Bandung City (Aliyah Magazine, 2016: 6).

Of the 32 classes in MAN 2 Kota Bandung, all classes based on the observation of the researcher already have an infocus device, only the frequency of utilization for the learning process is still lacking by the teacher. But precisely in each sheet of RPP on each subject, the teacher always includes power point learning media, learning resources downloaded from the internet, or using internet devices. Unlike the case with computer laboratories which are intended to be used for online examinations, mid examination, and computer based examination online.

MAN 2 Bandung since the beginning of March 2018 until July 2020 there have been significant changes in implementing distance learning, not a song limited to the national exam (Computer-Based National Examination/UNBK) or online midterm (PTS) online using the computer laboratory

room in school, but entering a new era of normal use at the homes of each student. Even in the UNBK simulation that was tried there were three learning shifts as a result of the large number of students. This is intended so that all class XII can apply it when UNBK is taking place.

In the ongoing learning process it is still conventional in nature, which is combining online and offline. Some subjects have applied ICT-based learning such as geography, English and Indonesian. Other subjects based on monitoring and evaluation conducted by PJJ in the field have started a paradigm shift in distance learning. Even conventional learning is the same as organizing online PTS. Before the pandemic covid 19 outbreak worldwide, including Indonesia, MAN 2 Bandung, according to Asep Encu as the madrasa head, had dared to make a breakthrough for online that only began in early March 2018, triggering the madrasa head so that every student acceptance would also use online system and every daily repetition is directed at repetitions that are online. Some learning tools that are often used include whatsapp video, Zoom Meeting and google classroom.

Based on documents contained in MAN 2 Kota Bandung, the condition of the ICT infrastructure recorded in the computer laboratory is 151 computers. With details 121 computers are purchases in 2015-2016, 30 computers are purchases from 2017 boss funds. Lenovo brand computers with Windows 10 are intended for online / UNBK / PTS online exam activities, as well as for tutoring for students from Ganesha operation tutoring agency (GO Agency Learning). Some rooms ranging from head room, deputy head room, and laboratory room are already connected with wifi. Only for learning classes not connected to wifi, so indirectly the categorization carried out by the Ministry of Education and Culture above has already been implemented in MAN 2 Bandung. Besides being used to carry out computer-based online exams (UNBK), and online-based Mid-Term Assessment (PTS), the laboratory space is also used by teachers to increase knowledge about their ICT skills, in addition to subject teachers' deliberations (MGMP) activities.

The condition of ICT infrastructure in MAN 2 Bandung City is adequate, but it is true that the implementation of the learning process has not been maximized, limited to assignments to students (the task of making videos), and more often used in computer laboratory space because it is intended for UNBK activities and PTS online. When referring to the ICT competency measurement tool for madrasa aliyah teachers in MAN 2 Kota Bandung, the ICT infrastructure conditions are indirectly covered in the form of curriculum (RPP) and assessment, pedagogic, and basic information technology competencies controlled by the majority of teachers in MAN 2 Bandung. While the aspects of communication, organization and administration, and professional teacher learning, the condition of infrastructure has not supported habitus to IT for teachers.

The description above actually provides a new perspective in using various monitoring and evaluation models related to distance learning which is almost evenly distributed in every school or madrasah, without exception MAN 2 Bandung. Researcher's offer regarding this paper is that there is a logic model as a starting point for evaluating online learning carried out by madrasahs in the context of monitoring and evaluation by teachers and madrasah so that the quality of learning is easy to control. Evaluation is an unavoidable task for schools as they embark on the journey of adopting technology programs. The various stakeholders want to have answers to their questions concerning the program (Singleton, 2008).

3.1 Utilization of ICT for Distance Education by Madrasah Aliyah Negeri 2 Teachers in the City of Bandung

The use of ICT-based learning media can indirectly increase students' knowledge about technological development, teachers utilize media in accordance with their competencies, teachers utilize many existing ICT-based learning media in accordance with the subjects taught. In the Minister of Education and Culture Regulation No. 81A of 2013 concerning Curriculum Implementation, the development of materials in learning planning refers to the main material in the syllabus and basic competencies contained in the third core competency, namely knowledge. Furthermore, learning material is elaborated by referring to the linearization of the fourth core competency, namely skills.

In supporting the daily learning process, teachers must know the use of ICT in addition to being a source of knowledge (basic ICT), it is also used to search material, download material, use email, and have a social media account (facebook, twiter) as an additional vehicle. Daily use of ICT is also carried out in order to support the learning process itself, so that the efforts of teachers in the use of ICT in it are also adapted to the learning process that starts with planning, implementation and evaluation.

In planning learning teachers must be able to integrate and utilize information and communication technology (ICT) in an integrative, systematic and effective manner in accordance with the situation and conditions. It is intended that students can develop high-level thinking patterns in learning. Utilization of ICT in learning planning in terms of (1) the suitability of the material with the facts, concepts and learning procedures of the 2013 curriculum, (2) the suitability of the learning design with the scientific approach, (3) the suitability of the evaluation of learning using authentic assessment.

In analyzing the use of ICT in lesson planning, researchers looked at the previous learning preparation documents contained in the Learning Implementation Plan (RPP) made by each teacher. Based on the lesson plan made by the teacher, an example of the use of ICT in planning learning of Chemistry class XI / I / Odd with Hydrocarbon material. Implementation of the use of ICT for learning in MAN 2 Kota Bandung based on observation and document review has been applied in various forms ranging from: assignment to students in the form of video, Quiper e-learning application, and QR Barcode which is patterned online and offline using whatsapp video media, google classroom and zoom meeting.

Based on observations not all teachers use ICT in their learning, this is due to several things including: some teachers still adopt the KTSP learning model with a sense of curriculum 2013, even though all classes have been provided with infocus/projectors but the teachers feel comfortable 'with the system conventional learning (offline).

3.2 Paedagogic Competence Theachers in Madrasah Aliyah Negeri 2 Bandung City

Some things that concern teachers regarding their pedagogical competencies include: understanding insights or educational foundations, mastering students' characteristics, mastering theories and principles of learning, developing curricula related to the subjects being taught, organizing learning that educates, and utilizing technology and information for the learning process

Understanding of insight or the educational foundation of teachers in MAN 2 Bandung based on document review is in the good category. This is evidenced by the level of education that has masters of approximately 30% undergraduate 69%, and 1% are doctorates. but apart from the latest education, when viewed from the mastery of the characteristics of students and mastery of theories

and principles of learning, according to the headmaster of madrasa, the majority of teachers have been able to distinguish the characteristics of students, and master the theory and principles of learning, so that it can help facilitate the process learning. The ability to understand students by teachers in MAN 2 Kota Bandung based on document review and the results of interviews with the headmaster of madrasa are in the good category. This can also be seen from the observation of the implementation of learning, teachers can do learning and guidance to students who have different cognitive and psychomotor abilities.

In terms of making learning designs, the ability of teachers to make learning designs, is in the good category, but still needs to be developed especially in preparing learning designs that are carried out in the laboratory, and in the field in accordance with scientific approaches in learning biology, physics and chemistry. This is in line with the explanation of Irwandi (2012), that learning a scientific approach should be designed by following typical educational principles, namely activities that focus on active student activities in constructing meaning or understanding. Teachers in MAN 2 Kota Bandung in the process of implementing learning are directed at efforts to educate and bring up a dialogic process. The process of implementing learning that is educational and dialogical.

Based on observation of learning illustrates that the scientific approach applied by the teacher is still limited to observing and asking questions. Implementation of learning with other learning resources besides books is still limited to student worksheets, the internet and teaching aids. Specifically related to the use of technology and information for the learning process, there are not many teachers who assign assignments to students through information technology devices, except for geography, teachers often give individual or group assignments in the form of making videos made by students and then assessed by the teacher.

The input components in the logic model include teachers, students and learning devices. In the context of this paper, it becomes a unit that supports the implementation of the learning process when the pandemic is still ongoing. the role of the head of the madrasah is only to monitor the implementation of the learning process as usual.

3.3 Constraints of Aliyah Negeri 2 Madrasah 2 Bandung City Teachers in Utilizing ICT for Education

Entering the pandemic, there is a change in learning, where MAN 2 Bandung tries to combine during and offline during PJJ, in response to the need for ICT use in education. The combination of online and offline In addition to making it easier for teachers to deliver material and information search, it also makes the learning process more alive. However, in the field implementation it turns out that there are still many obstacles encountered by teachers, especially teachers in MAN 2 Bandung related to the use of ICT in the learning process including: teachers are comfortable with conventional learning, classes are not connected with wifi, and the teacher's will to use ICT tools in the classroom are also lacking.

Another obstacle that causes teachers in learning is still conventional, namely: the uneven infrastructure that supports the application of technology in all classes. Another obstacle that needs to be resolved is the unpreparedness of human resources to utilize ICT in the learning process, this can actually also be in the sense that the madrasa lacks programmers who can design the education process can go on in such a way. This unpreparedness is due to the pattern of learning habits that still do not consider the role of ICT as important in improving the quality of learning, or the condition of the teacher is in the comfort zone '. They tend to be satisfied with the material that has been given by

the teacher offline, so that they do not want / lazy to search for additional information available on the Internet even though the facilities and infrastructure already support the application of ICT.

Referring to the ICT competency measurement tool for madrasah aliyah teachers in this paper, it is actually in accordance with what is prescribed by the UNESCO ICT Competency Framework for Teachers which includes: curriculum and assessment, pedagogy, basic competencies in information and communication technology, organization and administration, and teacher learning professional. It's just that there are limitations as well as in professional teacher learning is not a further discussion in research, then the use of ICT for organizations is also still not used by teachers in MAN 2 City of Bandung, except when the coemic pendemic period lasts, all teachers inevitably must be able to adapt to ICT devices.

4. Closing

1. Based on monitoring and evaluation, the condition of the ICT infrastructure is adequate. The evaluation of the use of ICT in this paper refers to the logic model, as an option for the implementation of distance learning carried out by the community of MAN 2 Bandung. The components of the input logic model consist of the availability of supporting infrastructure and institutional support. This is evidenced by the distribution of smartphones to underprivileged students in supporting offline and online learning, and the availability of internet devices in every class.

2. Context of the logic model, components of using ICT for distance learning at Madrasah Aliyah Negeri 2 Bandung, including in the context of the process, have been carried out in the form of material preparation & search (RPP), making learning administration, downloading materials, implementing online learning (QR Barcode, and quiper), making teaching materials, assigning students to using ICT (video), UNBK and PTS online, quiper e-learning application and QR Barcode which is done online and offline (combination) in the form of whatsapp groups, zoom meetings and google classrooms.

3. Context of the product in the evaluation logic model, namely the pedagogical competence of Madrasah Madrasah Aliyah Negeri 2 teachers in Bandung is in a good category, this includes understanding the insight or educational foundation, mastery of student characteristics, mastery of learning theories and principles, related curriculum development. with the subjects taught, the implementation of educational learning, and the use of technology and information. for the learning process. Teachers based on logic model products indirectly show technological literacy, even though sometimes they are constrained by ICT devices in class during their learning.

4. Constraints faced by teachers of Madrasah Aliyah Negeri 2 Kota Bandung in utilizing ICT for education: uneven wifi access, only one human resource for computer labs, no programmers, teachers trapped in a comfortable zone for teaching with conventional systems.

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