P-ISSN: 2527-3566
e-ISSN: 2528-2964

Vol. 5, No. 2, April 2021

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Developing Core Competencies for Islamic Higher Education in Indonesia in the Era of Industrial Revolution 4.0

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Article history
Received 12 Februari 2021
Revised 20 Februari 2021
Accepted 14 March 2021

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DOI: 10.35316/ jpii.v5i2.279

Abstract: The curriculum has a role as an instrument to conserve the culture of a nation. Without a good curriculum, the culture of a nation can be extinct right away because there are no preservation efforts. By way of inclusion of culture in the curriculum, it is hoped that it can be passed on to the next generation. Then they will know at least their ancestors' culture. It is called a conservative role. This research uses a quantitative approach with a case study method. Data collection was carried out by a questionnaire and in-depth interviews. Data were analyzed using an interactive model. This analysis technique started from data collection. Data was reduced after it had been collected. The next step was to presenting the data, verifying and drawing a conclusion. Based on the description above, this research is considered important to be carried out being an addition for existing policymakers in order to organize higher education. Moreover, it is in response to the demands and basic guidance of compiling a curriculum based on the Indonesian National Qualifications Framework (KKNI) which is being and will be implemented in higher education in Indonesia especially in Islamic colleges.
Keywords: core competencies; islamic higher education; curriculum

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Introduction

The era of the industrial revolution 4.0 is marked by quality competition. It requires all parts in various fields and development sectors to constantly enhance their competence. Moreover, it is necessary to adjust their vision, mission, objectives, and strategies to be relevant. These adjustments directly change the structure in macro, meso, and micro systems, as well as in education. The national education system must always be developed conforming to the needs and developments that occur at the local, national and global levels.

Islamic colleges as educational institutions aim to form Moslem scholars who have a noble character, good knowledge,

and high competence. This is for the welfare of the people and the fulfilment of public needs. Afterwards, these objectives are disclosed and developed in the main duties of Islamic colleges. The main duties in question are Islamic colleges are an integral part of national development which becomes a mediator between Islamic science and general science and technology (Mas'ud et al., 2004).

The issues in the management of higher education are around quality, potential, systems, work ethic, funding, infrastructure. Also, issues related to their function and role in building human resources. These criticisms are indicators to determine higher education quality standards. From several main problems above, some problems that require immediate solutions. They are the quality of graduates and higher education contributions to scientific development.

Table 1. Data of Unemployment Based on Educational Level

No.	The Highest Education Completed	2017		2018		2019
		February	August	February	August	February
1	Didn't/ Never Attended School	92,331	62,984	42,039	31,774	35,655
2	Didn't/ Haven't Graduated from Elementary School	546,897	404,435	446,812	326,962	435,655
3	Elementary School	1,292,234	904,561	967,630	898,145	954,010
4	Junior High School	1,281,240	1,274,417	1,249,761	1,131,214	1,219,767
5	Senior High School	1,552,894	1,910,829	1,650,636	1,930,320	1,680,794
6	Vocational High School	1,383,022	1,621,402	1,424,428	1,731,743	1,381,964
7	Academy/Diploma	249,705	242,937	300,845	220,932	269,976
8	University	606,939	618,758	789,113	729,601	839,019
	Total	**7,005,262**	**7,005,262**	**6,871,264**	**7,000,691**	**6,816,840**

College graduates are quite large in quantity, but they are poor in quality. The quality of college graduates still considered unable to meet the expectations of society. Basic competence and professionalism are often complained about. Eventually, there are many unemployed graduates. Likewise, the contribution of colleges to the development of science, technology, arts and culture is still considered insignificant by society. The public has not seen colleges as a center for the study of science for solving problems related to religion, even in the fields of science, art and culture, and technology-based on Islam. The results of college research on religious issues related to societal problems and science are not widely known by the public. Perhaps it is because of nonexistence, poor quality, or lack of dissemination.

Based on the descriptions and analyzes that have been stated above, one of the factors in the lack of success of colleges in achieving the main objectives contained in Government Regulation No.60 of 1999 is the curriculum factor. Considering, the curriculum is an educational plan that will be given to students. The existence of the curriculum is not only limited to the material that will be provided in the class but also it encompasses anything that is deliberately held or eliminated for students' experience in the class (Hamalik, 2007; WH Schubert, 1986). Therefore, the position of the curriculum as an urgent component cannot be dismissed in

the context of quality improvement in colleges. In a strategic study of the Higher Education Sector of the Ministry of Religion of the Republic of Indonesia, it is stated that the higher education curriculum at Islamic Religious Colleges is currently still very conventional and not based on applications and research. Also, less communicative to all parts involved. Therefore, one of the efforts to overcome these various problems and to fulfil the demands of the Law on Teachers and Lecturers No. 14 of 2005 is the development of a relevant Islamic Religious Education (PAI) curriculum. With the result that graduates are expected to have all the criteria for a professional teacher with various competencies obtained from college (Selvi, 2010). Besides, curriculum development is one of the strategies for national education development. Because graduates need to have some skills, especially the ability to use knowledge, understanding, with theoretical and practical thinking skills as well as other skills to be able to perform work duties effectively according to demands of certain works standards (Muhaimin, Suti'ah dan Prabowo & Sugeng, 2009). Shortly, the development of the curriculum is expected to obtain results, including the quality of education is more guaranteed; be able to meet the needs of employment, and the role of colleges as agents of change in society can be fulfilled.

Consequently, the review of the curriculum and learning process should focus on fostering graduates who have various competencies. It is especially the competencies needed in the era of the industrial revolution 4.0 (Blömeke & Kaiser, 2012). The review includes various aspects such as: first, scientific competence which includes intellectual intelligence, so they can transfer knowledge properly. Second, professional competence so they can carry out an effective learning process. Third, personal competence includes emotional intelligence and spiritual intelligence so they can be a good example for other students. Fourth, social competence includes social intelligence so they can understand their social dynamics and environment, and they can provide adequate and appropriate responses (Azyumardi, 2002).

Supplementary, the results of research (Alhamuddin et al., 2020) have mentioned some of the competencies expected by the user society in the industrial era 4.0. Those need to be considered in the curriculum development process in the Islamic Religious Education (PAI) study program. In the end, the quality of graduates can be competitive and useful in society.

Table 2. Graduates Competencies in User Society Perspective

No	Ability	SS	S	C	K
1	Integrity (Ethics and Morals)	93%	7%	0	0
2	Knowledge	90%	10%	0	0
3	Communication Skills	76&	24%	0	0
4	The Use of Information Technology	76%	24%	0	0
5	Loyalty and Commitment	76%	21%	3%	0
6	Initiative	72%	24%	4%	0
7	Self-Direction	72%	28%	0	0
8	Self-Development	69%	28%	3%	0

9	Leadership	69%	28%	3%	0
10	Creativity	69%	28%	3%	0
11	Problem Solving Skills	69%	28%	3%	0
12	Visionary	69%	28%	3%	0
13	Teamwork	62%	38%	0	0
14	Work Skills	62%	35%	3%	0
15	Managerial Skills	57%	39%	4%	0
16	Foreign Language Communication Skills	55%	24%	21%	0
17	Critical thinking	52%	45%	3%	0

Through take notice of the existing realities, the orientation for the preparation of graduates needs to be expanded. Several factors influence the quality of graduates of an educational institution, including college policies, curriculum, personnel, infrastructure, financial systems, information systems, environment, and social relations. As reported by the researcher, the curriculum can be deemed a top priority for attention. Furthermore, it is necessary to review the existing curriculum, by preparing all the tools that can support the achievement of this design.

Curriculum-Based on the Indonesian National Qualifications Framework

The Indonesian National Qualifications Framework (KKNI) was arranged in response to Indonesia's 2007 ratification toward the International Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific. It is useful for assessing the equivalence of learning outcomes and the qualifications of labour that will either study or work locally or overseas. Particularly, it becomes a reference for the quality of Indonesian education when it is compared with the education of other states. Indonesian higher education graduates can be equated with overseas graduates through this scheme. On the other hand, foreign graduates who will study in Indonesia can also liken learning outcomes. The role of the Indonesian National Qualifications Framework becomes important along with technological developments and human movements. Free market agreements in the Southeast Asian territory have enabled the movement of labour across countries. Hence, equalizing learning outcomes among ASEAN countries is very crucial. Moreover, the industrial revolution 4.0 is a challenge for colleges. Higher education graduates are expected to be qualified to face the era in which technology and artificial intelligence can replace human jobs.

The Role of the Higher Education Curriculum

The curriculum has numerous meanings, some say that "the curriculum is a set of courses" or "curriculum is a learning experience". Some state the curriculum is "learning plans or learning programs". In the context of Law No. 20 of 2003, the curriculum is defined as a set of arrangements regarding the objectives, contents, learning materials, and approaches. Based on these various

concepts of curriculum, this research can be defined as a designed document that contains the objectives; the content of the material and learning experiences; approaches and strategies; evaluations; and implementations. Thus, curriculum development includes the preparation of documents, implementation of documents, and evaluation of documents that have been prepared.

The role of curriculum development concerns the conservative, creative, critical and evaluative roles. The curriculum has a role as an instrument to conserve the culture of a nation. The culture of a nation can be instantly disappeared without a good curriculum because no institution tries to preserve it. By way of inclusion of culture in the curriculum, it is hoped that it can be passed on to the next generation. Then they will know at least their ancestors' culture. It is called a conservative role.

The creative role means that the curriculum must be adapted to the latest developments in knowledge and technology. Curriculum developers should be creative, workhorses, and have to constantly adapt to the changes. Consequently, the existing curriculum can match the needs and demands of society. In this case, the curriculum must be able to create new creations related to something, for example, related to the culture that grows in society so the culture is more appropriate with current development and demands of the society.

The last, role of critical and evaluation is that the curriculum can critically assess and evaluate the existence of the ancestors' culture to know the values contained in it. The next generation can sort out which culture can be applied if there are unfavourable cultural elements.

The curriculum should be able to develop the potential of students. With the result that they have a new mentality such as religious, productive, thrifty, nationalist, love environment, like reading, like sports, love art, innovative, creative, critical, democratic, love peace, love cleanliness, discipline, work hard, mastering information technology and so on. This is the ideal of Indonesian human resources. In other words, the curriculum must pay attention to the quality of humanity. It should be related to the development of science and the working world.

Framework for the Development of the Islamic Higher Education Curriculum

The substance of education is a contemplation on the actual problems faced by society in real life. The process of education or student learning experiences needs to prioritize the collaboration of various parts in the context of contemporary problems. Because of this, curriculum arrangement or educational program is begun from problems faced in the society as educational content. At the same time, the process or the students' learning experience is to explain science and technology, to work cooperatively and collaboratively, and to find solutions to these problems towards a better society. These improvements are carried out periodically and continuously according to the demands. Accordingly, good management will have a positive impact on sustainable innovation.

The college curriculum will have a very positive impact if it is arranged comprehensively which encompasses the facts from the college itself. The details that need to be studied are human resources, students, and supporting facilities. Factors concerning the parents are the family economy, parents' education, and their preferences. The socio-economic and cultural conditions of the local society, as well as the geographical conditions and the development of science, technology and art also affect. Ultimately it will emerge

knowledge of the developing strategic issues and the demands needed by prospective graduates. To grasp education it is necessary to pay attention to some questions who educate whom ?; what society are they?; when, where and what is the social position of the students?. Some of these fundamental questions become the basic framework in planning an educational curriculum. It is necessary to understand that a basic framework is a unit that is interconnected between one and another. Then the relationship between parts of the unit must be maintained to build relevance. Alhamuddin (2012) states that this process is carried out with a systemic approach effectively and efficiently based on existing needs. The process includes: identifying necessities and problems as well as for deciding alternative solutions. This approach has objectives, functions, components, interactions and synergic effects that are influenced by other systems. it undergoes a process of transformation, feedback and relative nature.

Research Method

This research was qualitative. Qualitative research is "research that produces descriptive data in the form of written or spoken and observable behaviour"(Moleong, 2019). Within the framework of this research, the method used was a case study. In general, the case study is a research method or strategy as well as the results of a study in a particular case. In the currently developing mainstream of social sciences, researchers generally emphasize the first notion. A case study is an approach to studying, explaining, or interpreting a case in the natural context without any intervention. Among all the various case studies, the most prominent tendency is an attempt to highlight a decision or a set of decisions (Schramm) in Yim (2002). A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context. When the boundaries between phenomenon and context are not evident and in which multiple sources of evidence are used. The case study was conducted because the researcher wanted to know the phenomenon intrinsically, the regularity of the case, and the specificity of the case. It is not for other external reasons. Meanwhile, the second type, instrumental case study was conducted for external reasons. It is not for the essence of the case.

This data collection aimed to answer research questions regarding the development of the core competencies of the Islamic Religious Education (PAI) curriculum at Islamic Religious Colleges (PTKI). Based on these research questions, data collection techniques in this study were carried out by literature study, interviews, documentation, and questionnaires. This research had directed to produce a description of the core competencies development of the Islamic Religious Education (PAI) curriculum in the era of the industrial revolution 4.0. Then the researchers used an interactive model analysis technique that had been developed by Mile & Huberman (1985). It was started from data collection, data reduction, data display, and concluding the data conveyed.

Result and Discussion

UNESCO had socialized four educational principles in 2000. They are learning to know, learning to do, learning to be, and learning to live together. Based on them, around 2002, the term competency had been correlated with the quality of graduates. Accordingly, the curriculum at that time was called a competency-based curriculum KBK. Afterwards, several laws and regulations appeared, including Law number 12 of 2012 concerning higher education, Presidential

Regulation number 8 of 2012 concerning The Indonesian National Qualifications Framework (KKNI), and Minister of Education and Culture Regulation number 49 of 2014 concerning national standards for higher education (Alhamuddin et al., 2020).

According to Presidential Regulation number 8 of 2012 Article 1, The Indonesian National Qualifications Framework (KKNI) is a capability qualification staging framework that can match, equalize, and integrate aspects of education with aspects of work training and work experience. It aims to provide recognition of workability conforming to work structures in various fields. It is a system that connects aspects of education and training to form quality and certified national human resources through formal education, informal education, non-formal education, training or work experience.

The Indonesian National Qualifications Framework in the field of higher education is a qualification staging framework that can connect, equalize, and integrate educational achievement from informal education, non-formal education, and work experience into types and levels of higher education. The qualification staging is intended to facilitate the education of someone who has work experience and has an educational achievement to bring recognition of certain graduate qualifications from higher education. It has nine qualification levels, which are as below.

First level, they can do simple, limited, regular work by using the tools, methods and processes that have been made, and under the guidance, supervision and responsibility of their supervisor. Second, they have factual insight. Third, they have a responsibility for their work. The second level is divided into three classifications. Initially, they can carry out a specific activity using tools and information, can obey routinely work regulations implemented, as well as providing valuable quality performance, under the control of a superior. they have basic operational insight and factual insight into specific activity sectors. Tertiary they are responsible for their work and can be given the responsibility of cultivating others.

The third level is, initially, they can do some specific work by interpreting information and using tools based on some work procedure options. Besides they can show their performance outcomes with measurable quality and quantity in indirect supervision. they have complex operational insight so they can solve various problems. Tertiary, they can work together and can communicate with others in the work environment. they are responsible for their work and can be given responsibility for the quantity and value of other's work.

The fourth level is, initially, they can perform specific duties by analyzing limited information, determining appropriate methods and showing performance with good quality and quantity. They have basic guidelines for certain areas of expertise and can equalize them to the problems that occur. Tertiary, they can work together and can make a written report in a limited scope and can have the initiative. they are responsible for their work and can be given responsibility for the work of others.

The fifth level is, initially, they can finish the work by determining the appropriate method and showing performance in good quality and quantity. they have theoretical guidelines in certain knowledge areas universally and can plan the solutions to the problems. Tertiary, they can organize teamwork and can make a comprehensive written report. they are responsible for their work and can be given responsibility for the results of group work.

The sixth level is, initially, they can apply their field of expertise, can take advantage of science and technology or arts in solving problems and can deal with all

situations. they have comprehensive theoretical guidelines in certain knowledge areas and specific theoretical guidelines in that knowledge and can make plan solutions to problems. Than they can make appropriate decisions based on information analysis and can provide guidance when determining a wide selection of solutions independently or in groups. they are responsible for their work and can be given responsibility for the work of an organization.

The seventh level is, initially, they can conceptualize and utilize resources in their responsibilities, and can evaluate the work comprehensively by utilizing science and technology or art to provide a strategic development method for the organization. They can solve science and technology or art problems in their fields with a monodisciplinary approach. Tertiary, they can carry out research and can choose decisions in consonance with overall accountability and responsibility for all aspects in their field of expertise.

The eighth level is, initially, they can develop science and technology or art in their field of expertise through research until they can create innovative and tested works. They can solve science and technology or art problems in their field of expertise using interdisciplinary or multidisciplinary methods. Tertiary, they can carry out research and develop knowledge that is useful for society and science and can achieve national and international achievements.

The ninth level is, initially, they can develop science and technology or art in their fields of expertise or their profession through research until they can create creative, original and tested works. They can solve science and technology or art problems in their field of expertise based on interdisciplinary, multidisciplinary and transdisciplinary methods. Based on it, the adjustment for the Islamic Religious Colleges (PTKI) curriculum, especially for the Islamic Religious Education (PAI) study program, needs to be done by paying attention to the development of core competencies of graduates (Nadler & Tushman, 1999). Thus the competencies of graduates encompass the abilities required by the industrial world and educational institutions (Alake-Tuenter et al., 2012).

Table 3. The Formulation of Knowledge Element in the Graduates Learning Outcomes (CPL) in the Islamic Religious Education (PAI) Study Program

Graduates' Profile	Knowledge Element in the Graduates Learning Outcomes (CPL)
Educators / Educational Practitioners	1. Be able to master the theoretical concepts and scientific foundations of education deeply as a starting point in developing the religious potential of the students to achieve the defined competency standards; 2. Be able to master the substance of the scientific studies of Islamic Religious Education (Qur'an-Hadith, Akidah-Akhlak, Fiqih, and Islamic Cultural History extensively, deeply, and contemporary to guide students to meet the defined competency standards;

	3. Be able to master Islamic Education learning theories and be able to formulate and implement them procedurally in Islamic Religious Education learning in schools; 4. Be able to master the integration concept of science, religion, and nationalism on Islamic Religious Education learning in schools; 5. Be able to master the concept of educational leadership in order to mobilize and cultivate the practice of Islamic teachings and to establish noble character of students in schools.
Knowledge Mastery	1. Be able to master the theoretical concepts and scientific foundation of education deeply as a starting point in developing the religious potential of students to achieve the defined competency standards. 2. Be able to master the substance of the scientific studies of Islamic Religious Education (Qur'an-Hadith, Akidah-Akhlak, Fiqih, and Islamic Cultural History extensively, deeply, and contemporary to guide students to meet the defined competency standards; 3. Be able to master Islamic Education learning theories and be able to formulate and implement them procedurally in Islamic Religious Education learning in schools; 4. Be able to master the integration concept of science, religion, and nationalism on Islamic Religious Education learning in schools; 5. Be able to master the concept of educational leadership in order to mobilize and cultivate the practice of Islamic teachings and to establish noble character of students in schools.
Managerial Abilities	1. Be able to make appropriate and strategic resolutions in Islamic Religious Education learning in schools based on analysis of relevant information, data and research results. 2. Be able to provide instructions and actions for solving various problems of Islamic

	Education independently and collectively to obtain quality and maximum learning outcomes in the establishment of students' religious behavior. 3. Be able to map discourse and religious phenomena as well as contemporary issues in Islamic Religious Education for a basis in the development of creative and innovative learning.
Responsibilities	1. Be able to be responsible for the implementation of Islamic Religious Education learning which is effective, productive, meaningful, tolerant and based on human values in a multi-religious society either independently or dependently 2. Be able to adapt appropriately in carrying out Islamic Religious Education learning duties based on a solid, stable, mature, wise and authoritative personality, become a good example for students, and have noble character independently and confidently.

The formulation of knowledge element in the Graduates Learning Outcomes (CPL) above is an elaboration of the knowledge element formulation in the Indonesian National Qualifications Framework (KKNI) level 6. It reads: "Mastering theoretical concepts in certain fields of knowledge in general and theoretical concepts of specific parts in-depth, and be able to formulate procedural problem solving". The provision of the Graduates Learning Outcomes refers to the Directorate General of Islamic Education Decree Number 2500 of 2018 regarding Competency Standards for Graduates and Learning Outcomes of Undergraduate Study Programs at Islamic Religious Colleges and the Islamic Religious Faculties at Higher Education. Islamic Religious Colleges can determine the Graduates Learning Outcomes by referring to that decree. Elements of attitude, knowledge and skills the Graduate's Learning Outcomes are not only achieved through courses but also from other student activities. The next step after determining the Graduates Learning Outcomes is determining the study material.

Table 4. Study Materials of Islamic Religious Education (PAI) Curriculum

Learning Outcomes	Study Materials												
	Philosophy	Language skills	Curriculum	Educational Theory	Instructional Theory	Educational Psychology Research	Instructional Model	Islamic Science	Instructional Evaluation	Instructional Management	Instructional Media
1. Be able to master various theoretical and philosophical concepts of general and Islamic	√										

	education as a foundation and frame of reference in the implementation of Islamic Religious Education in schools.	√	√				
2.	Be able to master research theory in the field of Islamic Religious Education in taking reflective action to improve quality with innovative actions in Islamic religious education learning in schools.			√		√	
3.	Be able to perceive the characteristics of students from physical, spiritual, social, cultural, emotional and intellectual aspects for the purposes of Islamic Religious Education learning in schools.				√		
4.	Be able to master instructional theory and instructional principles in the implementation of Islamic Religious Education learning in schools.	√					√
5.	Be able to master the material substance, structure, concept and scientific mindset of Islamic Religious Education which includes al-qur'an, hadits, akidah akhlak, ushul fikih, fikih, and Islamic cultural history.				√		
					√		
6.	Be able to master curriculum development theory, media and learning resources, as well as assessment and evaluation of Islamic Religious Education learning in schools.	√					√
7.	Be able to master entrepreneurship theory in the context of developing creative and innovative Islamic Religious Education learning.			√			√
				√			
8.	Be able to master the theory of educational leadership to position and develop Islamic Religious Education in schools				√		

	as parent in implementing character education in schools.		
9.	Be able to apply the curriculum for Islamic Religious Education in schools in consonance with the procedures and principles in curriculum development.	√	
10.	Be able to carry out educational learning on Islamic Religious Education in schools.	√	
11.	Be Able to utilize information and communication technology effectively and efficiently for Islamic Religious Education learning in schools.	√	
12.	Be able to facilitate the development of the students' religious potential to actualize the palpable religious abilities in schools.		
13.	Be Able to communicate effectively, empathically, and politely in the implementation of Islamic Religious Education duties in schools, in the academic community, or in the society.		
14.	Be able to carry out assessment and evaluation of the process and learning outcomes of Islamic Religious Education appropriately, and be able to use it for learning purposes.		
15.	Be able to carry out reflective actions and the use of information and communication technology to improve the quality of Islamic Religious Education learning in schools.		
16.	Be able to apply professional and scientific development actions in a sustainable, independent and collective manner through self-development and the use of information and		

	communication technology to realize self-performance as pure educators.

The table above illustrates the relationship between the Graduates Learning Outcomes (CPL) and the scientific structure of the Study Program. It is stated in the form of a branch of science as shown in the following "study material" table.

Table 5. Study Materials of Attitude and Value Elements

Learning Outcomes		Study Materials								
		Nationality	Citizenship	Language	Al-Qur'an	Hadits	Akhlak	Fiqih	Tarikh	Akidah
1.	Be devoted to God Almighty and be able to show a religious attitude	√	√	√	√	√	√	√	√	√
2.	Be able to vindicate human values in carrying out duties based on religion, morals and ethics;	√	√							√
3.	Be able to contribute in improving the quality of life in society, nation, state, and the advancement of civilization based on Pancasila;	√	√	√					√	
4.	Be able to have a role as citizens who are proud and love the country, have nationalism and have a sense of responsibility to the state and nation;	√	√	√		√	√		√	

Based on the explanation above, the development of core competencies in the Islamic Religious Colleges (PTKI) emphasizes professional competence. It means the Islamic Religious Colleges graduates have good and true Islamic insights. Also, knowledge competence and skills as leaders and preachers are a priority. They should prepare qualified graduates who have a strong faith and spiritual depth, noble character, breadth of knowledge and professional maturity. This is useful for them in carrying out their duties as teachers, employees and other professions in society. This is a core competency that should be developed in Islamic universities. It is in line with the objectives of Islamic education (Alhamuddin et al., 2018) that "the aim of education in Islam is to create a good man. It aims at the balanced growth of the total personality of man through the training of man's spirit, intellect, the rational self, feelings and bodily senses ".

> The meaning of education is a totality in the context of Islam is internet in the connotations of the terms tarbiyah, Ta'lim and ta'dib have taken together. What each of these terms conveys concerning man and his society and environment concerning God is related to others and together they represent the scope of education in Islam, both formal and non-formal…….education should aim at the balanced growth of the total personality through the training of man spirit,

> intellect, rational self feelings and bodily senses. The training imparted to a Muslim must be such that infused into the whole of this personality and creates in him an emotional attachment to Islam and enables him to follow the Qur'an and Sunnah and be governed by the Islamic system of values willingly and joyfully so that he may proceed to the realization of this status as khalifatullah to whom Allah has promised the authority of the universe.

The educational world is developing dynamically according to the times. Now, Indonesia is in the era of the Industrial Revolution 4.0. Previously, education in Indonesia had undergone several phases of change. This requires all elements of education to adjust and balance. Even they need to be one step ahead to solve the problems.

The dynamics of the industrial revolution were having changes. In industrial revolution 1.0, steam power had been used in the mechanization of production. In the industrial revolution 2.0, electric power had been used to organize mass production. Afterwards, in the industrial revolution 3.0, electronic technology and information technology have been used to automate production (Aziz Hussin, 2018). Now, in the era of the industrial revolution 4.0, new technology was invented which resulted in extraordinary changes in all fields, including education. Sketchily, the challenges and opportunities in the industrial revolution 4.0 (Syarbini, 2020) are as follows:

Table 6. The Challenges and Opportunities of the Era 4.0

No	The Challenges of the Era 4.0	The Opportunities of the Era 4.0
1	Industrial Readiness	Ecosystem innovation
2	Trusted workforce	Competitive industrial base
3	Simplicity of socio-cultural regulations	Technological investment
4	Diversification and job creation	Integration of small and medium enterprises and entrepreneurship

The era of the Industrial Revolution 4.0 was leading to demands for change in all aspects of education. In the beginning, the teacher's duty had been limited to transferring knowledge to students or just teaching in the class. Then this duty was replaced by technology in this era. These demands were encouraging a teacher to continue to transform, especially regarding the development of technology. Today, the world of education requires teachers who understand the dynamics of the class and can use technology. Renewable technology will make it easy and more flexible for teachers so that they can deliver creative, innovative, meaningful and fun learning.

The professional demands of a teacher in the Industrial Revolution 4.0 were in agreement with the development of information and technology. This requires teachers to be able to adapt and update their abilities in technology and information.

However, technological sophistication does not make the teacher's role replaced by robots. There is an important role of the teachers' spirit as a figure assigned to instil positive character in students. No matter how sophisticated the technology, the teacher's role cannot be replaced, even with a robot or a super sophisticated machine. It is because the teacher's job is not only to transfer knowledge, but also to shape the noble character of the students with courtesy, tolerance, empathy, creativity, and nationality.

The important role of teachers is part of the Indonesia development agenda in 2020-2024. It is the third agenda which contains about improving quality and competitiveness of human resources which focuses on the fulfilment of basic services. For example, mapping quality education services and improving access to health services. The development of quality human resources also relies on the quality of education. In this case, teachers are expected to become agents of strengthening the nation's human resources in building national character.

This Industrial Revolution 4.0 also requires teacher figures to be able to prepare students with 21st-century skills. (Syarbini, 2020) stated that there are at least 10 important skills in the Industrial Revolution Era 4.0. They are complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation, and cognitive flexibility. This is a challenge and an opportunity for teachers to be able to meet the needs of education dynamics. As stated in (Greenstein, 2012) that education in the industrial era 4.0 needs to be seen as a development of competence. It consists of three major components. They are competent to think, act, and live in the world. The components of competence to think to include critical thinking, creative thinking, and problem-solving. The components of competence to act include communication, collaboration, digital literacy, and technological literacy. The components of competence to live include initiative, self-direction, global understanding, and social responsibility.

However, advancing the world of education in Indonesia is not easy. There are many problems with education in Indonesia today, including the quality and competitiveness of Indonesian education which is very low and uneven. When compared to other countries in ASEAN, Indonesia is at the bottom. It also can be seen from the parameters of the Program for International Student Assessment (PISA) test results. The level of Indonesian children in reading, math, and science is below the level of children in Singaporeans, Malaysians, Vietnamese and Thai children.

Of course, there are reasons for this problem. One of them is the low competence of teachers. The teacher certification program has indeed been running for a long time, yet in fact, there are still many teachers whose low pedagogic and professional competencies. Their score is just below the standard of the Teacher Competency Assessment (UKG). Besides, the low competence of teachers in Indonesia is caused by several factors. They are, their educational background is not appropriate with the discipline being taught; there are still many of them not yet undergraduate; the Continuous Professional Improvement (PKB) program for teachers is still low; teacher recruitment is not corresponding either mechanism or work analysis.

Education in the industrial era 4.0 needs to be viewed as a competency development consisting of three major components, they are the competence to think, act, and live in the world (Greenstein, 2012). The thinking component includes critical thinking, creative thinking, and

problem-solving. Acting components include communication, collaboration, digital literacy, and technology literacy. The components of life in the world include initiative, self-direction (self-direction), global understanding, and social responsibility.

The Educational Paradigm in the Industrial Revolution Era 4.0 brings changes to the components of education, including those related to the learning process in the classroom. The principles of learning include being student-centred, children as active learners, the use of information and communication technology (Virtual Learning) infrastructure, the house becomes a learning environment and the classroom as a practice room (flipped classroom), self-learning and development of soft-skills (critical, creative, and problem-solving).

These changes make the classroom not the only place to study. The virtual world becomes a classroom. An impact is several professions will be replaced by artificial intelligence. Also, the role of teachers not only more than just teaching, but also managing student learning in a flexible, creative, interesting, and more fun way. In addition to these five competencies, the Ministry of Education and Culture said there were five competencies that teachers ought to prepare for the Industrial Revolution 4.0 (Puncreobutr, 2016). They are, first, educational competencies and internet-based learning competencies; second, technological commercialization competencies. It means that a teacher must have competencies that will bring students to have an entrepreneurial attitude with technology. Third, competence in globalization, that is to say, teachers are not confused about culture and can solve educational problems. Fourth, competence in future strategies is the competence to predict the future and to provide the strategy. Fifth, counsellor competence is the teachers' competence to understand student psychological problems because of current development (Barth et al., 2007).

Conclusion

Based on the data presented above, it is concluded that the development of core competencies for the Islamic study program graduates are required to adjust the competence of graduates against the demands and challenges of the industrial era 4.0. In expectation, the Islamic study program graduates can survive in their competition with graduates from various other universities locally, nationally, and internationally.

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Policy Analysis: the Transformation of IAIN to UIN for the Period 2002-2017 in the Ministry of Religious Affairs of the Republic of Indonesia

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Article history
Received 20 February 2021
Revised 13 March 2021
Accepted 21 March 2021

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DOI: 10.35316/jpii.v5i2.288

Abstract: This article examined the transformation policy of IAIN to UIN by the Directorate of Islamic Religious Higher Education (Dit. Diktis) of the Directorate General of Islamic Education (Ditjen Pendis) of the Ministry of Religious Affairs (Kemenag) of the Republic of Indonesia. Specifically, this article described in-depth the background and policy objectives of Dit. Diktis in the transformation of IAIN to UIN; and the implementation of the transformation policy of IAIN to UIN at Dit. Diktis of the Ministry of Religious Affairs from 2002 to 2017. This study used a qualitative method with the type of case study research. Data collection techniques consist of observation method, in-depth interview, and documentation. While data analysis techniques include: data reduction, data presentation, verification, and concluding. Checking the validity of the data consists of credibility, transferability, dependability, and confirmability. The results of this study found that the basic policy formulation for the transformation of IAIN to UIN occurred in different contexts and situations for three periods. They are: 1) the first period, 2002-2005 (6 UIN), 2) the second period, 2013-2015 (5 UIN), and 3) The third period, 2017 (6 UIN).
Keywords: transformation; State Islamic Institute; State Islamic University

Introduction

The State Islamic Religious College (PTKIN) in Indonesia has the task of realizing the vision of the Ministry of Religious Affairs to educate the nation's life. It is the centre for scientific and Islamic studies, in order to integrate religious sciences and technological sciences. In addition, it has a strategic role in realizing the concept of Islam wasathiyah. It is the concept to create Muslims who are peaceful, tolerant, and democratic towards diversity in Indonesia.

The State Islamic Religious College's (PTKIN) contribution is expected it will be able to encourage the progress of Muslims and the Indonesian in general. Therefore, strategic stages in the policy of PTKIN's development must be based on a strong vision and mission. The managers of PTKIN is expected it will be able to provide optimal services to society and to improve the quality of higher education performance, the quality of PTKIN graduates, and the development of spreading Islamic religious values in Indonesia.

The term policy is widely used in government or political systems. This term has a very broad meaning. A policy can be interpreted as a problem or thing related to the public interest. It can also be interpreted as government administration (Hasbullah, 2015). The word policy can also be related to the word wisdom. Because the use of the word policy and wisdom in terms of pronunciation in the Indonesian language is almost the same, but both of them has a different meaning (Tilaar & Nugroho, 2009). The use of the term policy is based on rational considerations. But in the use of the term wisdom which emphasizes the emotional considerations.

The policy consists of elements of intelligence, expertise, and wisdom, which become unity in a concept and principle. It is a reference in making work plans and leadership. It is also a justification for the action of the government administrators and organizations in a statement of ideals (Sagala, 2008). The policy is a label for a field of action. It is a general expression based on general objectives or desired circumstances. The policy is government decisions, formal authorizations, and the part of a well-planned program. Nanang Fatah (Fattah, 2013) emphasized that the description above that can be understood as two main points in the policy. First, there are a number of problems with certain characteristics in the policy. Second, certain characteristics in the policy-making process can be interpreted as a process. The educational process is a sustainable cycle. Because education is a systematic effort to achieve awareness and knowledge. Education in a narrow sense is synonymous with school because education essentially contains elements of learning organized by schools as educational institutions.

Educational policy has two main characteristics. First, it is essential which has a function to overcome a difficult and complex problem. Second, this comprehensive has a function to minimize the emergence of losses for all parties. Therefore, education policy-making must take into consideration substances that are closely related to the public interest (Sagala, 2008). The formulation of education policy must refer to the ideal depiction of policy implementation. It can be done by deep analysis at all levels of society. Afterwards, based on that study, it is analyzed and studied comprehensively to find factors that influence policy implementation and to conduct mitigation.

The process of policy implementation analysis leads to deep scientific studies to build a new paradigm with comprehensive and integrative educational policy concepts and theories. Educational policy studies should refer to philosophical foundations, transparency, democratization, and excellent service by involving society participation. Society participation in the formulation of educational policies provides criticism so the policies formulated will be in agreement with the needs and expectations of the society and nation (Irianto, 2011). Educational policies should be able to encourage the quality of education until they can be realized effectively and efficiently. Syaiful Sagala explained that there are two approaches in education, they are:

1. The Empirical Approach is an educational policy approach that emphasizes the description of the causes and effects of a policy. Therefore this policy emphasizes empirical information sources that consist of facts and values of educational policy implementation. Accordingly, problems related to policy implementation are factual and valid.

2. An evaluative approach is an approach that emphasizes the determination of the quality or value of the policy. It is used to answer evaluative questions by containing the benefits or values of the policies that have been determined. It has two stages, they are: a) evaluation on the process is used to determine the application of educational policies in order to determine the achievements of policies that have been implemented, and b) evaluation on impact is used to determine the impact of changes on the desired objectives of the policy (Sagala, 2008).

Based on the description above, it can be understood that the policy-making process is carried out in some stages. Because it is a series of interrelated actions. It consists of agenda determination, policy formulation, policy adoption, policy implementation, and policy assessment. PTKIN's policies are also expected to be dynamic, especially in governance development policy and quality development policy. At least it has been reflected in the management and development policies of Islamic Religious Higher Education in the Ministry of Religious Affairs in the form of a Decree of the Minister of Religious Affairs or a Regulation of the Minister of Religious Affairs. (KMA Nomor 394 Tahun 2003 Tentang Pedoman Pendirian Perguruan Tinggi Agama, 2003)

Based on the Strategic Development Planning of the Directorate General of Islamic Education in 2015-2019, the Islamic education policy emphasizes some improvement programs, they are: 1) access and quality of Early Childhood Education (PAUD), 2) access and quality of 12-year compulsory education, 3) access, quality, and relevance of Islamic religious higher education, 4) quality of religious education services, 5) quality of religious education in a non-Islamic school and 6) quality of religious education governance. (Kementrian Agama Republik Indonesia, 2019)

Based on these policy directions, the strategy for developing Islamic Education in the Directorate General of Islamic Education is implemented through five priority activities, as follows: 1) improving the quality and relevance of Islamic religious education; 2) increasing access, quality, relevance and competitiveness of Islamic religious education 3) increasing access, quality, and relevance of Islamic schools, 4) increasing access, quality, relevance and competitiveness of Islamic higher education; 5) support for educational management and other technical duties of Islamic education.

The aim of policy and development of Islamic education is to improve and develop the quality, relevance, access, competitiveness, governance and accountability of Islamic education institutions. It can be done by providing data and information planning, strengthening planning and budgeting documents, improving the quality of administrative services, improving the quality of employment affairs management, and the availability of applicable regulations.

Furthermore, regarding the Strategic Plan of the Directorate General of Islamic Education for 2015-2019, seven strategic objectives of Islamic Higher Education are explained, they are:

1. Expanding affordability, equality, and security access to the widest possible extent to obtain Islamic Religious Higher Education;
2. National development necessities;
3. Increasing the quality and relevance of academic and non-academic activities

for students of Islamic Religious Higher Education;
4. Enhancing the effective and efficient system of the Directorate of Islamic Religious Higher Education;
5. Developing partnerships between Islamic Religious Universities and stakeholders;
6. Enhancing autonomous Islamic Religious Higher Education within the framework of transparency and accountability;
7. Developing a distinctive Islamic Religious Higher Education and developing a destination for world Islamic studies.

The policies explanation above is summarized into four main policies for Islamic higher education are: 1) expanding access to Islamic higher education; 2) improving the quality, relevance and competitiveness of Islamic higher education; 3) strengthening management and accountability system of Islamic Religious Colleges (PTKI), and 4) developing Islamic higher education based on the integration of science and Islamic moderation.

Based on the description above, it can be perceived that the policy output of improving the quality of Islamic higher education leads to 1) increasing access and affordability of Islamic Religious Colleges (PTKI), 2) improving the quality and service of Islamic Religious Colleges (PTKI), 3) enhancing the quality and competitiveness of graduates of Islamic Religious Colleges (PTKI), and 4) improving the quality and governance of Islamic Religious Colleges (PTKI).

The existence of the State Islamic Religious Colleges (PTKIN) was inseparable from the establishment of the Islamic College (STI) in Padang and Jakarta in 1946. It adopted the curriculum of the Faculty of Ushuludin, Al-Azhar University, Cairo. Furthermore, on August 14, 1957, based on the Decree of the Minister of Religious Affairs of the Republic of Indonesia Number 1 of 1957, the Government Academy for Religious Studies (ADIA) was established as the official academy of the Ministry of Religious Affairs which was prepared to educate and prepare civil servants to become religious teachers. (Diktis, 2015)

Furthermore, in 1960, dealt with Presidential Regulation No. 11/1960 regarding the establishment of the State Islamic Institute (IAIN), PTAIN Yogyakarta and ADIA Jakarta were changed to become the State Islamic Institute. IAIN based in Yogyakarta was inaugurated by the Minister of Religious Affairs K. H. Wahib Wahab on August 24, 1960, in Yogyakarta. Subsequently, on July 1, 1965, the name of IAIN Yogyakarta was changed to IAIN Sunan Kalijaga. This occasion was the forerunner to the establishment of the Islamic Religious College.

Further development, the establishment of IAIN was accompanied by the establishment of IAIN branches based on Presidential Regulation Number 27 of 1963. Until the end of the 20th century, there were fourteen State Islamic Institutes. IAIN North Sumatra was the last IAIN established which was inaugurated by the Minister of Religious Affairs at that time, Prof. Dr H. A. Mukti Ali in 1973 (Kementrian Agama Republik Indonesia, 2019).

In 1997 the organization rationalization was carried out. All IAIN branches with a total of 40 faculty branches were changed into 33 State Islamic Religious Colleges (STAIN). This policy referred to Presidential Decree No. 11/1997. On the other hand, society's need for opening general majors/study programs in IAIN had begun to appear since 1975. In

1975 the State Islamic Senior High School (MAN) in Indonesia changed a portion of the content of religious and general subjects. This policy caused IAIN to open a general major called Tadris in Tarbiyah Faculty. In addition, this policy had caused many MAN graduates to continue their studies in general majors/study programs.

Therefore, in 1998 IAIN Syarif Hidayatulloh Jakarta developed the concept of IAIN with a wider mandate. Afterwards, it opened departments or study programs in the fields of exact sciences and social sciences, including psychology, accounting, management, informatics engineering, and agribusiness. In subsequent developments, this department/study program was upgraded to become a faculty (Suwito, 2019). Therefore, The State Islamic Religious Colleges (PTKIN) was growing rapidly in the reformation era. It had been marked by the development of non-Islamic studies faculties and departments. This condition encouraged institutional transformation from an institute to a university, in the form of State Islamic University (UIN).

Eventually UIN was established for the first time. It is IAIN Syarif Hidayatullah Jakarta, which transformed from IAIN to UIN Syarif Hidayatullah Jakarta in 2002. IAIN Sunan Kalijaga Yogyakarta became UIN Sunan Kalijaga in 2004. Then in succession PTKIN carried out the transformation from IAIN to UIN including are UIN Maulana Malik Ibarahim Malang, UIN Alaudin Makasar, UIN Syarif Qosim Riau, and UIN Sunan Gunung Djati Bandung.

Literature Review

Transformation Policy of IAIN to UIN

Harold Laswell explained that policy is a form of intellectual work because it involves the decision-making process including description and objectives to be achieved, performance development, long-term impact, research and evaluation to ensure effective and efficient current policy (Syafiie, 2005).

Woll was cited by Tangkilisan, describing public policy as some government activities to solve problems in society, either directly or indirectly or through various institutions related to society. William N. Dunn addressed the term public policy as a complex dependency pattern of interdependent collective choices that were made by government agencies or offices (Dunn, 2002).

Transformation of IAIN to UIN

The Islamic Religious Colleges (PTKI) is currently faced with major and fundamental problems regarding educational output. this has not fulfilled various aspects of the needs of society. Even though the demands for change continue with the times.

Bassam Tibi emphasized that the problem of higher education is a consequence of the problems faced by PTKI in general. Those problems such as the unclear foundation of the scientific epistemology, the unclear vision and mission (as a da'wah, academic or practical-pragmatic institution), even issues of curriculum, human resources, budget funds, cooperation (stakeholders), and other supporting facilities (Tibi, 1991).

It has been a long time since some parties wanted the transformation of IAIN to UIN. This condition has caused several transformations of IAIN to UIN. The

reason is not only a change in the status of the institution but also the wider mandate. Besides, it is also important that each UIN has its own uniqueness so there are different patterns in reconstructing science. (Kementrian Agama Republik Indonesia, 2019). The transformation discourse of IAIN to UIN is expected to integrate religion and science. The transformation is a process of change that occurs gradually. The change is done by responding to the influence of external and internal elements. The transformation of IAIN to UIN is a dynamic cycle. Since the establishment of PTKI in the Ministry of Religious Affairs, it is quite dynamic in responding to the times by carrying out a process of institutional transformation. (Nata, 2003a)

The emergence of the transformation idea of IAIN to UIN in Islamic religious higher education is actually based on the spirit of returning a more comprehensive Islamic study with a broader scientific discipline, such as psychology, communication, sociology, anthropology, and so on.

Several reasons for the importance of the transformation of IAIN to UIN are as follows:

1. Demands and needs of the global era that could degrade the role of IAIN graduates if only studying religious sciences;
2. Eliminating the dichotomy of science and religion which can result in a secular attitude;
3. The needs of stakeholders in Islamic higher education (Minhaji, 2002).

Other reasons for the transformation of IAIN to UIN are: 1) moderate Islam in Indonesia and deradicalization, 2) enhancing access to Islamic higher education in the regions, and 3) the Gross Enrollment Rate (APK) of secondary education nationally is still quite low.

Therefore, education reform must be carried out immediately so the society at large can understand that education is a human investment. It must be designed and financed more adequately with the purpose that this nation is able to grow and compete internationally along with the growth and democratization processes in Indonesia. Fazlurrahman stated that every reform in Islam must begin with education. (Tunru, 2018)

The transformation of IAIN to UIN is believed to have positive impacts, they are: First, the existence of UIN is able to solve the dualism problem between the education system and the scientific dichotomy, specifically religion and science; Second, the existence of UIN as an institution will be able to develop and combine Islamic religious sciences and modern science; Third, the existence of UIN can raise student interest, capacity and competitiveness. (Juhaya, 2002)

The Foundation of Transformation of IAIN to UIN: the Integration of Science

The idea of scientific integration is motivated by a dichotomy between the general sciences and religious sciences.

Regardless of the controversy over the transformation of IAIN to UIN, the interesting fact is the tendency of Islamic studies. Since IAIN was founded, it had owned two main functions are: 1) IAIN has a strategic position as a centre for religious studies which has a religious mission to enlighten the Muslim community in understanding Islamic teachings, and 2) IAIN becomes avant-garde in studying Islam as an academic discipline, not as a religious doctrine (Azra, 1999).

The transformation of IAIN to UIN is a step forward that requiring comprehensive and tactical studies.

Because it will have an impact on all aspects for instance changes in form, curriculum, extra-curricular activities, management, and collaborative networks. It will have an impact on the quality of graduates (high output quality). So that the existence of UIN is institutionally equal to higher education institutions in Indonesia. On the other hand, UIN has scientific specifications and distinctions that are different from other universities (Kamaruddin, 2006).

Knowledge integration is one of the missions to transform IAIN to UIN. Knowledge integration is one of the main targets in transformation. Therefore the transformation process must have a very strong foundation for supporting the development of UIN.

The foundation for the transformation of IAIN to UIN, which contains the mission of integrating science consisting of philosophical, normative, juridical and historical bases (Kementrian Agama Republik Indonesia, 2019).

The Implications of Transformation of IAIN to UIN

The emergence of the transformation idea of IAIN to UIN will have implications as follows:

1. a more comprehensive scientific scope and Islamic studies;
2. the students 'and lecturers' insights are more advanced by trying to integrate Islam and science in every discussion;
3. the academic management will be greater, the land will be wider, the need for lecturers and administrative staff will be more developed. (Nata, 2001)

Other implications of the transformation of IAIN to UIN are:

1. Raw input is more varied. It is not only from Islamic senior high schools graduates but also from senior high schools because UIN has provided general departments and faculties;
2. There is no dichotomy of the religious sciences and general sciences by integrating religious sciences and general sciences; (Munadi & Kusmana, n.d.)
3. Job opportunities for graduates will be wider in scope and existence; (Nata, 2010)
4. provide opportunities for graduates to perform vertical mobility with wider opportunities;
5. the operation of professional education, high quality, and exhaustive will be the demands of all parties.

Research Method

The policy analysis in this study used the perspective of Michael Hill in William N. Dunn. According to Michael Hill, there were two perspectives in public policy analysis. They were analysis of policy and analysis for policy (Nata, 2003). The main subject of this research was the policy of the transformation of IAIN to UIN by the Directorate of Islamic Religious Higher Education at the Directorate General of Islamic Education of the Ministry of Religious Affairs of the Republic of Indonesia. Specifically, this research policy analysis framework prompted academic interest. It was directed on a deep study of the background of the implementation of the transformation of IAIN to UIN by the Directorate of Islamic Religious Higher Education at the Directorate General of Islamic Education, Ministry of Religious Affairs of the Republic of Indonesia from 2002 to 2017. The use of the case study in this research was a methodological choice to strengthen the study of qualitative

research. Because the use of the case study was determined based on individual cases. It is not determined by the research methods used. The use of case studies was functioned to strengthen qualitative data.

Based on the description above, this study used an intrinsic type of case study to understand a case. It aimed to describe the nature of the case in representing other cases related to the transformation of IAIN to UIN. This study used a qualitative approach from Anselm Strauss & Juliet Corbin's perspective to fully explore and understand the implementation of the transformation policy of IAIN to UIN. (Corbin & Strauss, 2003)

Qualitative research tends to use several methods consist of: observation or observation methods, interviews, and documentation studies (Moleong, 2019) qualitative approaches tend to use interpretive-based research (Creswell & Creswell, 2018). Therefore, this study used data collection methods in the form of a deep interview. The deep interview in this research is used to reveal facts to a number of parts in the Directorate of Islamic Religious Higher Education at the Directorate General of Islamic Education of the Indonesian Ministry of Religious Affairs regarding the transformation process of IAIN to UIN. Besides the data collection process also used documentation methods to complement the findings of data and information during an interview.

Written sources in this study were the collection of laws and regulations on Islamic education, the collection of Minister of Religious Affairs Regulations concerning the Organization and Work Procedures of State Islamic Colleges, the collection of Regulations on Islamic Religious Higher Education and other documents such as the proposed academic manuscripts for the transformation of IAIN to UIN as well as relevant meeting minutes.

Data collection techniques in this study used several data collection techniques, they are in-depth interview, documentation and observation. It was expressed by Devine, "Interviews (also documentation) strive to uncover a deeper level of information in order to capture meaning, process, and context, where explanation 'involves describing and understanding people as conscious and social human beings" (Marsh & Stoker, 1995).

The research subject was the Directorate of Higher Education at the Directorate General of Islamic Education of the Ministry of Religious Affairs of the Republic of Indonesia, which handled the establishment of policies for the transformation of IAIN to UIN. Furthermore, based on the documentation that had been collected, the researcher conducted a document review related to the transformation policy of IAIN to UIN and the implementation of the policy of the Directorate of Islamic Religious Higher Education. Data analysis used data reduction, data presentation, and verification, and drawing conclusions, (Miles, 2015). Conclusions were drawn by comparing the suitability of the research subject's statements with the meaning contained in the concepts being studied. Drawing conclusions were expected to be new findings in the form of a description of an object that had never existed before. Checking the validity of the data was carried out to prove that the research had fulfilled the elements of scientific research as well as to test the data obtained in this study. Credibility, transferability, dependability, confirmability of data presentation by researchers can be justified (Zamili, 2015).

Findings

Based on the presentation of data and research analysis, the research findings on the background of the transformation policy of IAIN to UIN were as follows: the background and policy objectives of the Director-General of Islamic Religious Higher Education (Diktis) regarding the transformation policy of IAIN to UIN had been founded. The transformation of IAIN to UIN is to meet the demands of society's needs in the field of higher education. When IAIN had begun to open general departments/study programs to meet the demands of society, IAIN had to change to UIN. The forms of society's demands for PTKIN as follows: wanted to increase the quality and quantity of PTKIN by developing general departments/study programs and institutional development. PTKIN was expected to be able to compete in quality both nationally and internationally. The Development of moderate Islam in Indonesia and deradicalization. The enhancement of APK PTK. The desire of several regions to have State Islamic Universities. The enhancement of the number of MA/SMA/SMK/ equivalent graduates who need higher education institutions to continue their studies. The continuation of the historical development of PTKIN dynamically.

While the research findings related to the objectives of the transformation of IAIN to UIN are as follows:

1. The improvement of the quality, access, distribution and competitiveness of the management of Islamic Religious Higher Education;
2. Integration of science and strengthen distinction;
3. The Improvement of the Islamic Religious Higher Education System;
4. The socialization of Islamic moderation for society and graduates ;
5. The enhancement of the scientific and Islamic studies scope to make it more comprehensive;
6. The enhancement of students' and lecturers' insight to be more developed by integrating Islam and science in every learning;
7. The development of PTKIN to be bigger, which has an impact on budget development, infrastructure development, and human resources development.

The objective of the transformation policy of IAIN to UIN had directed to a type of distributive public policy. It was a policy regarding the allocation of services or benefits to certain segments within certain groups of society from the broad population of society.

Based on these findings, the Directorate of Higher Education of Islamic Religion had implemented the stages of public policy based on William Dunn through the agenda-setting stage, the policy formulation stage, the policy adoption/legitimacy stage, the policy implementation stage, and the policy evaluation stage. Findings were obtained based on the research data on the implementation of the transformation policy IAIN to UIN from 2002 to 2017, as follows:

Originally, the transformation policy from IAIN to UIN was based on a proposal from IAIN. It was not based on a policy line that had set out in the grand design. It means that policy was established from the bottom-up process. It was pioneered by IAIN Syarif Hidayatullah Jakarta which had succeeded in proposing a change to UIN in 2002. It was then followed by other IAIN/STAIN.

Dit. Diktis Kemenag had conducted feasibility tests on the proposed transformation based on three issues, they are administration, quality assurance, and

politics. In the first period of the transformation policy from IAIN to UIN (2002-2005), political considerations had become decisive.

That was why in the first period of the transformation policy of IAIN to UIN, there was one STAIN that succeeded in joining the transformation policy to UIN. It was STAIN Malang that transform to UIN Malang. It was the only STAIN that had succeeded in changing the form directly to UIN, without previously becoming IAIN. It had happened because at that time there was no regulation in the Ministry of Religious affairs which regulated it;

In the next development, Dit. Diktis Kemenag issued several regulations as guidelines for the transformation policy of IAIN to UIN. One of them was requiring a distinction as a standard of excellence and uniqueness after becoming UIN. Also various administrative requirements and other quality standards. In this second period, the process of creating a transformation policy was still based on the IAIN's proposal, but the proposal must follow the regulations set by the Ministry of Religion;

Since the Ministry of Religion issued PMA No. 15/2014 concerning a change in forms of PTK and then Dit. Diktis made the Grand Design for the Development of Islamic Higher Education, the transformation policy of IAIN to UIN for the Third Period was carried out according to the policy lines and planning of the Ministry of Religious Affairs. It means that during this period the policy was a technical action by the Ministry of Religious Affairs. It was more top-down.

The procedure for submitting the transformation of IAIN to UIN was as follows: 1) IAIN submitted a proposal for transformation to UIN to Dit. Diktis. It was supported by proposals and academic papers based on the provisions; 2) Dit. Diktis conducted a feasibility study based on regulations; 3) The Minister of Religious Affairs through Biro Ortala Setjen processed the proposed transformation with other ministries to obtain endorsement from the President in the form of a Presidential Regulation concerning the Change from IAIN to UIN;

In 2017 the Ministry of Religious Affairs implemented a moratorium on the transformation of IAIN to UIN. This moratorium decision was actually to follow up on the evaluation conducted by the Ministry Administrative and Bureaucratic Reform (KEMENPAN RB) which has not seen the success of UIN in realizing the distinction.

The moratorium in 2017 was to evaluate the change in the form of IAIN to UIN based on the letter of the Director-General of Islamic Education Number 2534 / Dj.I / PP.03.2 / 07/2017 dated July 4, 2017. The moratorium was aimed at structuring the institution and improving the quality of state Islamic religious education as well as conducting a review of the scientific integration in PTKIN.

Until now, in 2020, there is no evaluation result document conducted by Dit. Diktis Kemenag dictates the level of achievement of UIN in realizing the standardization and other targets promised. It because of Dit. Diktis has not published guidelines and indicators for the success of UIN to measure and evaluate it.

Since the first time PTKIN was established, there had been two main missions. They were to make it a religious study institute and to make it a da'wah institution. On the one hand, the transformation policy of IAIN to UIN had led to the tendency to make religious study institute. It can be seen from the pattern of new student recruitment that did not require the ability of religious knowledge, especially for general study program

students. The impact was the strange conditions occur, on the one hand, the general study program is opened in order to carry out scientific integration, but on the other hand, there is no requirement for the ability of Islamic religious knowledge as a new student candidate. The advancement to improve the ability of Islamic religious knowledge for general study program students is also still considered weak. There was already a concept of 'Ma'had Aly'. But in fact, Ma'had Aly had not been able to accommodate all general study program students to get guidance to improve Islamic knowledge. This is a challenge that needs to get a special evaluation, especially with regard to the objectives of transformation so that UIN is able to carry out scientific integration.

The requirements for submitting the transformation of IAIN to UIN includes the following:

1. The proposer PTKIN must have a grand design for the quality development of UIN to transform IAIN to UIN;
2. The transformation of IAIN to UIN refers to the Grand Design of Islamic Higher Education, they are 1) Strengthening Institutional Capacity in 2015-2019, 2) Reaching National Competitiveness in 2020-2024, 3) Positioning in Regional Competitiveness in 2025-2029 4) Becoming the world's reference for Islamic studies in 2030-2034;
3. Referring to the Strategic Planning for 2020-2024. The Directorate of Islamic Religious Higher Education already has 17 State Islamic Universities (UIN) in Indonesia and will be developed to 30 State Islamic Universities (UIN).

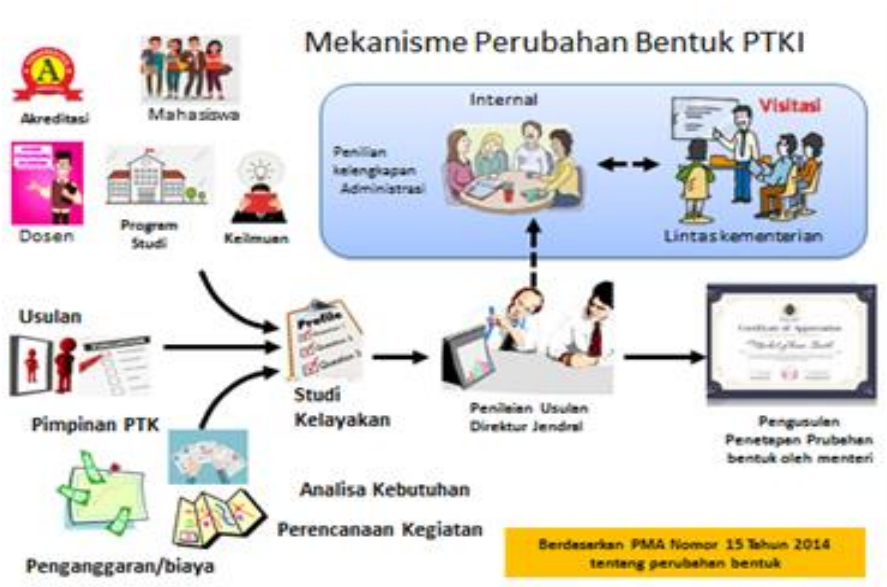
The implementation of the transformation before 2014 was carried out by reviewing the transformation proposal. In contrast to the implementation of the transformation of IAIN to UIN in 2017 after the issuance of Regulation of the Minister of Religious Affairs Number 15 of 2014 concerning the transformation of Islamic Religious Colleges. At that time, every IAIN that proposed a transformation to UIN must include an integration paradigm and an integrated curriculum design in detail and comprehensive.

The process of submission for PTKIN transformation referred to Minister of Religious Affairs Regulation (PMA) Number 15 of 2014. PTKIN submitted a proposal accompanied by an academic text to the Directorate General of Islamic Education. After it had been reviewed, assessed and analysed by the Directorate General of Islamic Education, it was then recommended to the Minister of Religious Affairs through the Secretariat General. It would be reviewed the completeness of the requirements by the Organization and Administration Bureau (Biro Ortala).

It would be proposed transformation to KemenPAN-RB if the results of the review were eligible. It would be returned to the proposer to complete the lack of requirements if the results of the review were ineligible. During the inter-ministerial process, the responsibility belonged to the Organization and Administration Bureau (Biro Ortala) in Secretariat General.

The process of a feasibility study for transformation referred to the minimum assessment according to PMA 15/2014 with criteria A> 350 Highly Recommended; B 300-349 Recommended; C< 300 Did Not Recommend. For more details, it can be seen in the figure below:

Figure.1 The Transformation Mechanism of Religious Colleges (PTK) Based on The Minister of Religious Affairs Regulation (PMA) 15 of 2014



The interferences faced by PTKIN in the transformation process is an immature concept in the core business that would be implemented, especially in the establishment of general study programs. As a result, many IAINs were still trapped in their desire to change their status.

The results of the research showed that 6 State Islamic Universities (UIN) that had been resulted from the transformation policy in 2017 had not been able to establish general study programs in agreement with the provisions. However, the transformation process in the first stage had mostly been going well, although there were no clear guidelines on how to carry out the transformation in integrating science.

Factors that influence the constraints in the transformation process of IAIN to UIN are: 1) the vagueness in the implementation of development programs and the measurement of performance achievement; 2) resources and funding; 3) management; and 4) culture.

The form of transformation from IAIN to UIN in several aspects and the distinctions in each PTKIN was explained into several periods as follows:

1. Educational platform aspects
   a) The First Period (2002-2005)

      In the first period of the transformation of IAIN to UIN in the educational platform, the theme of integration of Islamic values and scientific values was very dominant. In this period, the spirit of scientific integration had begun to become the main study.

   b) The Second Period (2013-2015)

      In the second period of the transformation of IAIN to UIN in the educational platform, the theme of integration of Islamic values and scientific knowledge had remained the main object of study. In this period there was an emphasis on Islamic character in order to strengthen the distinction between PTKIN and PTU.

   c) The Third Period (2017)

      The third period of the transformation of IAIN to UIN in the educational platform still retained the integration of Islamic values and scientific values. It was more visible in the aspects of epistemology, ontology and axiology with was

strengthened by entrepreneurial abilities.

Based on the description above, the findings of the transformation of IAIN to UIN were as follows:

a) Demands and needs of the global era which could degrade the role of IAIN graduates if only studying religious sciences;
b) Excision of the dichotomy between science knowledge and religious knowledge which ultimately results in a secular attitude;
c) The needs of stakeholders of Islamic Religious Higher Education for graduates to master not only the religious sciences but entrepreneurship.

2. Scientific Paradigm
   a) The First Period (2002-2005)

      The first period of the transformation of IAIN to UIN in the scientific paradigm developed the concept of scientific integration-interconnection with al-Quran dan Hadits as the main foundation. Those scientific integration-interconnection concepts had been interpreted based on the concepts in each PTKIN.

   b) The Second Period (2013-2015)

      The second period of the transformation of IAIN to UIN in the scientific paradigm still referred to the concept of scientific integration-interconnection. Nevertheless, it was partial and it was considered to degrade the existence of UIN as PTKIN under the Directorate of Islamic Religious Higher Education. In this period, a moratorium on the transformation of IAIN to UIN had been conducted to reinforce the provision of scientific integration-interconnection in PTKIN. In this period the Grand Design of Institutional Transformation of Islamic Higher Education had been compiled.

   c) The Third Period (2017)

      The third period of the transformation of IAIN to UIN in the scientific paradigm still committed to the concept of scientific integration-interconnection based on the Grand Design of Islamic Higher Education Institutional Transformation. PTKIN that would carry out the transformation should include an institutional profile, a strategic development planning and a scientific integration-interconnection paradigm.

The description above shows that the scientific paradigm of the transformation of IAIN to UIN should incorporate the complete concept of integration-interconnection with a philosophical, normative, juridical and historical foundation.

3. Educational Management Foundation Aspects
   a) The First Period (2002-2005)

      The first period of the transformation of IAIN to UIN in the foundation of the educational management connected to Pancasila as the national principle and Islam as science, humanity, modernity, and nationality. It had tried to combine the educational foundation of Indonesian and Islamic moderation with a strategy of strengthening Islamic religious knowledge, humanities, social science, natural science, formal, and applied science.

   b) The Second Period (2013-2014)

      The second period of the transformation of IAIN to UIN in the foundation of educational management bolstered Islam and Pancasila in order to develop

religious moderation. It aimed to produce independent, superior, competitive and innovative human resources with the Islamic Learning Society approach.

c) The Third Period (2017)

The third period of the transformation of IAIN to UIN in the foundation of educational management examined the ontological status of both qauliyyah and kauniyah verses. It was the core or basis for science and it was used as a grand narrative in the development of science.

The foundation of educational management was aimed at producing scholars, intellectuals, and humanist who are able to face high competence, excellence performance, diversity (plurality), the information and technology revolution and knowledge transfer.

The foundation of the educational management in the third period had referred to the core values of UIN, they are: 1) opening to change by building an attitude that is ready to learn and willing to improve; 2) consistent in maintaining selected core values; 3) commitment to work systemically; 4) oriented towards achieving the vision; 5) the quality management system becomes a tool to maintain the performance standard of vision achievement; 6) featuring perfect service, and 7) strong and creative leadership.

Core values were concerns that were valued, were upheld, were carried out, and were the soul of an organization or the core values of various sets of values or basic principles that had been believed and had been imbued by UIN in transforming knowledge.

Basic values or principles were superior strengths in strengthening scientific integration in UIN. Core values, in Islamic religious colleges, could also limit the choice to realize the vision and mission of integration of UIN. It would even become a distinction for PTKIN in the transformation of IAIN to UIN.

Based on the description above, there were the most basic considerations in implementing six core values in Islamic religious colleges are 1) intellectualism, 2) intelligence, 3) openness, 4) modernity, 5), nationality and 6), godliness.

Discussion

Theoretical Implications

This research intensifies the theory that was presented by Said Zainal in his book entitled Public Policy (2016). Zainal stated that policy does not always come from the government. It can come from society suggestions through a bottom-up process. The role of the government was to process proposals to policies, as happened in the transformation process of IAIN to UIN, which had been facilitated by Dit. Diktis through formal procedures;

The research results also prove the correctness of the theory presented by Robert E. Goodin, Martin Rein, and Michael Moran, quoting Richard Neustadt's opinion, that the political process and policymaking are mostly a matter of "persuasion" which begins from the process of selecting, deciding, and enacting. It because before the issuance of The Regulation of Minister of Religious Affairs (PMA) no. 15 of 2014 concerning the change in forms of Religious Colleges (PTK), the political role was very dominant in the success of the transformation policy of IAIN/STAIN to UIN;

After the issuance of PMA Number 15 of 2014, the establishment process of the

transformation policy of IAIN to UIN must follow this regulation. The role of the government (Dit. Diktis) is to carry out regulations as a basis for creating policies. This policy process is conforming to the theory presented by William N. Dunn, that public policy contains a list of interrelated action options, which are systematically compiled by government institutions, agencies, or officials (Dunn, 2002). Also according to Thomas R. Dye, public policy is any policy that the government chooses to do or not to do (Dye, 2018). It was also supported by Anderson that public policy is formulated and developed by institutions that have close relationships with government agencies and officials.

Practical Implications

This research has practical implications for four parties, namely: the Directorate of Higher Education of Islamic Religion, the Directorate General of Islamic Education at the Ministry of Religion, the State Islamic University, the State Islamic Institute which will or is currently transforming to IAIN, and for researchers of the IAIN transformation policy to the next UIN.

Directorate of Islamic Religious Higher Education

The results of this study are useful for the Directorate General of Higher Education to be used as material for evaluating the already implemented transformation policy of IAIN to UIN. It is also useful as a reference for the next implementation of the transformation policy of IAIN to UIN.

State Islamic University (UIN)

The results of this study are useful for UIN to become a reference for evaluating the success of being transformed from IAIN. The evaluation that needs to be done is primarily to measure the level of success in realizing the strategic planning as outlined in the academic manuscript of the proposal of IAIN to UIN. It is also to measure the level of success in realizing the scientific integration planning and the distinction, has been achieved properly or not.

State Islamic Institute (IAIN)

State Islamic Institutes (IAIN) which are going to or which are in the process of transforming to UIN can use the results of this research as material for evaluating their struggle process. The results of this study are very useful for IAIN to guide the process of implementing the transformation to UIN.

Further Research in Transformation Policy of IAIN to UIN

The results of this study are very useful for further research to develop a side of information that has not explored in this study. For example, examining the implications of the transformation of IAIN to UIN at every UIN. The results of this study can serve as a basic reference for the research.

Conclusion

The Transformation Policy of IAIN to UIN which implemented by the

Directorate of Islamic Religious Higher Education (Dit. Diktis) of the Directorate General of Islamic Education (Ditjen Pendis) of the Ministry of Religious Affairs of the Republic of Indonesia was a bottom-up policy. It was to fulfil the IAIN/STAIN proposal to transform to UIN and meet the demands of society in the field of higher education, such as availability of general study programs, institutional development, improvement in APK PTK, development of PTKIN access throughout regions, and the continuation of the historical development of PTKIN.

The objectives of the transformation policy of IAIN to UIN were: the improvement of the quality and competitiveness of PTKIN in the national and international levels; scientific integration and distinction reinforcement; Islamic moderation development and deradicalization; the improvement of the scientific and Islamic scope to be more comprehensive; and the endorsement of independence and the autonomy of PTKIN.

The transformation policy of IAIN to UIN from 2002 to 2017 had created 17 UIN. The transformation process was based on three criteria, consist of administration, quality assurance, and communication of the religious colleges (PTK) leadership with the government. The transformation procedure was: a) IAIN proposed transformation to UIN to Dit. Diktis. It was supported by proposals and academic papers according to the provisions; b) Dit. Diktis conducted a feasibility test based on regulations; c) The Minister of Religious Affairs through the Bureau of Organization and Management (Biro Ortala) processed the proposed transformation with other ministries to obtain endorsement from the President in the form of a Presidential Regulation concerning the transformation of IAIN to UIN.

Initially, the role of intensive communication between the leadership of PTKIN and government officials was the most decisive matter in the process of transformation of IAIN to UIN. However, after the Ministry of Religious Affairs had issued PMA Number 15 of 2014 concerning Changes in the Form of religious colleges (PTK), administrative considerations and quality assurance became the main considerations.

The institutional organization of UIN was formulated based on 3 foundation aspects, they are educational platform aspects, scientific paradigm aspects, and educational management foundation aspects. The Ministry of Religious Affairs carried out a moratorium on the transformation of IAIN to UIN in 2017, to evaluate the transformation of IAIN to UIN on 11 UIN by connecting to the letter of the Director-General of Islamic Education Number 2534 / Dj.I / PP.03.2 / 07/2017 of 4 July 2017. There was no evaluation conducted by the Directorate of Islamic Higher Education in Ministry of Religious Affairs (Dit. Diktis Kemenag) until 2020 to measure the level of achievement of UIN in realizing the distinction and other targets promised in proposals and academic papers;

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Social Media Acceptability Among *ulama* in Ogan Ilir District, South Sumatra, Indonesia

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Article history
Received 6 February 2021
Revised 11 March 2021
Accepted 14 March 2021

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DOI: 10.35316/jpii.v5i2.286

Abstract: Social media was born as a derivative of information and communication technology (ICT) development. It was stimulating new habits for people to produce, consumption, and distribution information in online interaction. Although many researchers had studied social media, no one had provided attention to social media and *ulama* (Islamic scholar). This article aimed to describe patterns of ownership, access, perceived usefulness, and ease of use of social media among *ulama*. Based on qualitative research in Ogan Ilir District, South Sumatera Province, we found that the acceptability of social media among *ulama* in Ogan Ilir District was positive. Online life had become the new identity of *ulama* in this area. They used social media for broadcasting da'wah message and selling or buying goods and service. However, no ulama produced their messages of da'wah. Facebook was the most popular social media among *ulama*. We also found that feeling safe and comfortable, got the real benefits from social media, network quality, and *jihad* in cyberspace had positive contributions to social media adoption within *ulama*. We identified the availability of time, audience response, negative content, addictive situations, and internet cost as the inhibiting factor of social media adoption among the *ulama*. We discussed these findings and suggested practical recommendations and an agenda for further research.

Keywords: *TAM; social media; ulama; Islam; Indonesia*

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Introduction

In South Sumatera province, the Ogan Ilir district is unique because it uses the Santri city phrase as its slogan. Santri is an acronym from Santun (honest), Aman (safety), Nyaman (comfortable), Tertib (orderly), Religious (religious), dan Indah (beautiful). They choose this slogan to symbolize Ogan Ilir is the oldest district in South Sumatera Province which has a tradition of Islamic boarding school (*pesantren*). Currently, the number of *pesantren* in Ogan Ilir Regency reaches twenty units and occupying the fifth position in South Sumatra Province.

Although there are many Islamic boarding schools in the Ogan Ilir district, no ulama in this area performs da'wah in the digital world using social media. This condition is very different from some scholars on Java island who actively use social media in da'wah activities such as KH.

Mustofa Bisri (@gusmusgusmu), KH. Abdullah Gymnastiar (@aagym), Ustadz Yusuf Mansyur (@Yusuf_Mansyur), Felix Siauw (@felixsiauw), and Solahudin Wahid (@Gus_Solah) who actively preach on Twitter. This empirical phenomenon indicates a digital divide between ulama in Java and Sumatra island that requires a scientific explanation. This article aims to describe the pattern of access, ownership, usage, and analyze the supporting and inhibiting factors of social media adoption among scholars in the Ogan Ilir District.

This research is important because we are difficult to find a study on ICT in Indonesia that explain social media usage among ulama to support their da'wah activities. Theoretical discourse tends to regard the development of ICT as "disrupter and challenger" the status quo of religious authority (Lim et al., 2013). We just find one article that discusses this topic (Herbert, 2011; Jinan, 2013; Turner, 2007). However, we consider this research much biased because the internet infrastructure in Java is better than the other islands in Indonesia. This research will complement previous scientific studies on ICT and Muslim community relationships, for example, the phenomenon of mobile religiosity (Muchtar & Ritchey, 2014) that emerged in the early penetration of the mobile phone industry in Indonesia and the commercialization of da'wah triggered by the broadcast media industry (Barendregt, 2009).

Simply put, social media is an application capable to connect people through an internet-based telecommunication network. The word "social" in social media phrases means that this app allows people to make meaning together (Rakhmani, 2014) establish and maintain relations between humans as individuals and collectivism(Baym, 2015). Social media applications, among others like Facebook, Twitter, Line, WhatsApp, Instagram, Google+, LinkedIn, Telegram, and others. Social interaction through social media is generally in the form of data exchange, whether text, images, audio, video, and documents. The hardware is smartphones that already support a variety of social media applications. Mobile social media is chosen by many people because one device can do the process of production, distribution, and consumption of data (Jensen, 2015).

Social media taxonomy can be explained based on three criteria: user, content format, and function. Social media users can be located at the micro-level (e.g., individual), meso (e.g., private corporations), and macros (e.g., government institutions). Formats social media content include text, images, video, sound, and games. Meanwhile, social media function consists of networking, sharing, collaboration, and geo-location (Humphreys, 2013). The interaction that binds the whole social media function is based on the principle of reciprocity (El Ouirdi et al., 2014). Recent research has shown that social interaction through social media tends to talk-focused, one-on-one exchanges with closer relational partners, and rarely undifferentiated, broadcasted, or passively consumed information shared with acquaintances (Lewis, 2015). However, some researchers consider that interaction through social media tends to ignore human intention and social norms (Hall, 2018).

Because social media is internet-based, its usage can also be explained from three aspects, namely: access, involvement, and interaction (Shah, 2015). But not everyone has access, can be involved, and able to interact in the internet world. This situation is called the digital divide (Lievrouw & Livingstone, 2006). In the context of social media, one is unwilling to use social media because of unstable economic factors, education factors, lack of support from people and friends, lack of leisure time, low skills, and unwilling to

maintain social contact with information and communication technology (Barzilai-Nahon, 2006).

Results of recent research indicate that the use of social media increases the involvement and political participation of citizens (Bobkowski, 2013). At the corporate business level, the use of social media can improve internal efficiency, team collaboration, innovation, and transformation of corporate culture (Gazali, 2014; Holt et al., 2013; Skoric et al., 2016). In civil society, as shown in India case, social media has the power of chain to trigger the acceleration of movement of various elements of civil society (Young & Hinesly, 2014). Also, the use of media can trigger a user to imitate the behaviour of others, release emotions, and seek social support (Kumar & Thapa, 2015). In Turkey, the majority of social media users just follow, learn, and interact with others. Not enough users act as original content creation (Keating et al., 2016). Social media can be seen as a public space that brings together professional media industry players and citizen journalism (Kurtuluş et al., 2015).

Meanwhile, the term da'wah refers to every activity of Muslims, both individually and collectively, to invite all people to embrace Islam. As confirmed in the Qur'an: *"Invite to the way of your Lord with wisdom and good instruction and argue with them in the best way. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is [rightly] guided"* (QS. an-Nahl [16]: 125). The essence of da'wah activity is to communicate Islamic messages (Ceron, 2015) through dialogue (Anis, 2011).

Theoretically, there are two approaches to performs da'wah, is "kerisalahan" and "kerahmatan". According to "kerisalahan" approach, da'wah is each effort to disseminate Islam for all humankind so that they will know, understand, appreciate, and practice Islam as the view of life. For "kerahmatan" approach, da'wah is the effort to make Islam as the way of life which brings happiness and solve the problem of humankind (Engineer, 2002). From the Islamic law point of view, da'wah is *fardhu ain* (personal duty) and *fardhu kifaayah* (collective duty) (Syeikh, 2015). Da'wah can involve a small or limited audience (*fardiah*), or a big audience (*ammah*). Da'wah can be performed orally (*bil lisan*), action (*bil haal*), writing (*bit tadwin*), and good teaching (*bil hikmah*).

Many theories can be used to explain the process of adoption and acceptability of technology by specific individuals, groups, or organizations, such as the Theory of Reasoned Action/TRA (Hauser, 2012) the Unified Theory of Acceptance and Use of Technology/UTAUT(Rialp et al., 2016). However, when compared with these theories, the Technology Acceptance Model/TAM is more utilized by researchers. Initially, TAM contains two variables: user perceptions about the perceived usefulness and perceived ease of use (Acarli & Sağlam, 2015; Alikilic & Atabek, 2012; Mariam el Ouirdi et al., 2016; Venkatesh et al., 2003; Verma, 2015). Some research conducted by researchers using TAM (Davis, 1989) affirms the theoretical strength of this model to explain the process of technology adoption at the end-user level. Because of the influence of TRA, three new variables appear in TAM: external variables, attitudes toward using, behavioural intention to use (Adams et al., 1992; Martins et al., 2011; Samodra & Mariani, 2012; Segars & Grover, 1993). Some researchers did not add variables but only changed the direction of the relationship between variables (Davis, 1989).

Many researchers continue to modify TAM. They add new variables in the TAM model such as gender (Szajna, 1996), prior experience (Gefen & Straub, 1997), subjective norms (Taylor & Todd, 1995a), short-term and long-term usefulness (Taylor & Todd,

1995b), belief before and after technology adoption (Chau, 1996) Since 2000, several researchers integrating new construct into the TAM model such as social influence and cognitive instrumental process (Karahanna et al., 1999, 2006; Merikivi et al., 2012) change and perception formation (Venkatesh & Davis, 2000), compatibility (Venkatesh, 2000), risk and trust (Chau & Hu, 2002), object-based belief and attitudes (Pavlou P.A., 2003), national culture (Wixom & Todd, 2005), adoption constraints (Srite & Karahanna, 2006), personality (Yarbrough & Smith, 2007), motivation (Ali et al., 2016; Chan-Olmsted & Shay, 2016; Devaraj et al., 2008), emotion (Fosso Wamba et al., 2017; Kim, 2012; Malhotra et al., 2008), engagement and user satisfaction (Lee et al., 2012; Sträub, 2009), social cognitive (Lim et al., 2013), the user's critical mass (Khang et al., 2014), technological capabilities and reliability (Lee et al., 2013), religious experience (Rauniar et al., 2014), technology and social access (Shuai, 2016), and privacy (Chang et al., 2016).

At the level of private organizations, TAM is integrated with several variables, for example, image, constraints, and organizational innovation (Bright et al., 2015; Lin & Kim, 2016), rules and standardization (Siamagka et al., 2015), market changes, risks and benefits (Bretschneider & Parker, 2016), knowledge exchange (Veldeman et al., 2017), and government support and technological innovation (Behringer & Sassenberg, 2015). In public organizations, the adoption of social media is influenced by technology, organizational, cultural and administrative factors (Calantone et al., 2006).

From the literature on the above, no research using the TAM model to explain the process of adoption of information and communication technology, especially social media, among ulama as end-users. Some research shows how *ulama* have a central role as actors of social, economic and political change (McNutt, 2014) because of their great figures (Kuntowijoyo, 1987; Lukens-Bell, 2001; Machmudi, 2014; Turmudi, 2016; Yasuko, 1997) moral stability and the quality of faith (Dhofier, 1980) and upholding the principle of genuine life (Siregar et al., 2013). Understanding the ICT and ulama relationship are the first steps to maximize the role of ICT and ulama as a trigger for social change at the grassroots level.

Research Method

This research uses a mixed approach (quantitative and qualitative). We apply a qualitative approach, particularly grounded research (Strauss & Corbin, 1994) method because it is considered more capable of elaborating thoughts, attitudes, beliefs, and practices of social media usage among ulama in the Ogan Ilir District. The quantitative approach is translated using the quantitative descriptive technique. The research data is derived from face-to-face interviews with the informant. In-depth interviews guided by questionnaires and interview guides. The results of interviews in transcripts, coded and analyzed in line with interactive methods. We use the triangulation method to verification data during the in-depth interview process. For the perceived usefulness and ease of use variable, we adapt and modify the measurement scale developed by Davis (1989).

Our informant is *ulama* or *kyai*. *Ulama* or *kyai* is a teacher of Islam in an Islamic boarding school that runs a double role, both as a teacher and as a religious speaker. In some cases, the *kyai* is attached to a person because of his religious knowledge even though he lacks competence as a religious speaker. We choose 20 informants randomly from several Islamic boarding schools in the Ogan Ilir district. Our focus is on ownership, access, social media usage, perceived usefulness, and ease of use of social media.

Findings

Information description

To maintain the confidentiality of the informant's identity, we encode female informants with symbols P (P1 to P8), while the male code is L symbols (e.g., L1, L2, L3, and so on). Based on their sex, our informants consist of twelve males and eight females. The average age of the informant is thirty-five point eight years. The youngest informant age is seventeen years old, while the oldest is fifty years old. Based on their education, three informants completed the postgraduate level, fifteen informants have bachelor level, and one informant has completed the secondary level. Based on their institution, ten informants come from Pondok Pesantren al-Ittiapaqiah (PPI), eight informants from Pondok Pesantren Raudhatul Ulum (PPRU), and two informants from the Office of the Ministry of Religious Affairs at Ogan Ilir District. Most informant jobs are Islamic boarding school teachers. There are only two people who work as civil servants in the Office of the Department of Religious Affairs at Ogan Ilir District.

Regarding social media ownership, Facebook is the most popular social media among informants. There is only one person who does not use Facebook. WhatsApp, Instagram, and Blackberry Messenger (BBM) is another type of social media that is also widely used by informants. Twitter and Google+ tend to be less desirable by informants. The frequency of social media usage among ulama is varied, mainly concerning the length of time. Six ulama use Facebook less than 1 hour/day, while those who use Facebook for 1-2 hours/day and >2 hours/day reach four people. Mostly ulama uses Instagram, WhatsApp, and BBM for less than 1 hour/day. They use Twitter and Google+ for 1-2 hours/day. This data shows that social media usage among ulama in the Ogan Ilir district is still rational.

Ulama using social media does not depend on the place. They use social media anywhere as long as there is a signal, data packet, and willingness to give attention to social media on their smartphone. This data shows that online lifestyle has become the new identity of ulama in the Ogan Ilir district. Because social media usage is rational action, they have specific timing to give attention to their social media. In the morning, some informant starts using social media at 05.00 AM, 06.30 AM, 09.00 AM, or at 10.00 AM. In the daytime, they consume social media at 11.00 AM, 12.00 PM, 1.00 PM, or 2.00 PM. In the afternoon, the informants opened their social media at 3.00 PM, 4.00 PM, or 5.00 PM. They are operating social media at 8:00 PM or 9:00 PM at the night.

Since most informants use social media for <1 hour/day, each informant spends 15 minutes when using social media in the morning, afternoon, afternoon, and evening. In these 15 minutes, informants do many things such as reading a history of chatting, searching information, typing or sending a message and sharing pictures, audio, video, or calling someone. Qualitative data show that *ulama* in Ogan Ilir district also use social media to broadcast messages, especially messages related to Islamic teachings, through WhatsApp and BBM. Ulama also uses a Facebook wall to *"advised each other to truth and advised each other to patience*." (QS. al-Ashr [103]: 3). However, no *ulama* producing their da'wah messages that are disseminating through social media. Instead, *ulama* tend to copy and paste the viral da'wah messages in social media.

The trigger is, of course, the large information about Islamic knowledge spreading through social media. As reported by L10, "*I receive a da'wah message every day from many people. These messages have a similar theme: invite people to more closed to Allah SWT*

and Islam. In one of the WhatsApp group, for example, one of my friends is always sending a picture that reminds us to do tahajud prayer. Another friend posts a message from various sources on Islamic teaching Islam every day. I know that he just copy and paste" (interview, L10, 04/09/2017). Also, some Alquran and hadiths applications allow one to spread the verses of the Qur'an and hadith through social media. "*In my opinion, this is a positive trend in the context of a society which a high motivation to read social media posts and low motivation to read the Qur'an and hadith*" (Interview, P7, 05/09/2017). This practice supports the copy-paste habit and weakening ulama to create a da'wah message. At the same time, not all ulama has digital skill. It is diagnosed by L1 who said that "*it is not easy to change the image and video into a da'wah message. Creating da'wah messages in text format is easy, we just typing a word. Conversely, changing the picture and video messages is difficult because someone should be able to operate the additional software. One must provide special attention, energy, and time to make da'wah message in the multimedia format*" (Interview, L1, 04/09/2017).

Social Media Acceptability Among Ulama

To measure social media acceptability among ulama in Ogan Ilir District, we use and modify the TAM model which consists of two variables: perceived usefulness and perceived ease of use. The perceived usefulness is measured using six statements: (a) social media allows me to complete work quickly; (b) social media improve my performance; (c) by using social media my productivity has increased; (d) by using social media my work has become more effective; (e) social media makes my work easier; (f) social media is sufficient to support the work alone. Informants have six options: very strongly disagree, strongly disagree, disagree, hesitate, agree, strongly agree, and very strongly agree. The maximal score of the perceived usefulness is forty-two, and the minimum score is six.

The ease of measured using six statements: (a) learning to use social media is easy; (b) it is easy to use social media to help the work I want to do; (c) my interactions with social media are very clear and easy to understand; (d) interacting with social media is flexible; (e) I think, it is easy to be skilled using social media; (f) social media is easy to use. Informants have six options: very strongly disagree, strongly disagree, disagree, hesitate, agree, strongly agree, and very strongly agree. The maximal score is forty-two, and the minimum score is six.

The average for perceived usefulness is 28.5 (twenty-eight points five). Informants who have scored above the average value is 55 percent. We call this group "the high group." In contrast, informants who have perceived usefulness score were below the average values were categorized as "the low group." The proportion of "the low groups" is 45 percent. For ease of use, the average score is 29.5 (twenty-nine points five). Informants who have scored above the average score are labelled as "the easy groups" and whose scores are below the average are identified as "the difficult groups." The proportion of "the easy groups" is 70 percent and "the difficult groups" is 30 percent.

Because the proportion of "the high groups" and "the easy groups" is greater than "the low groups" and "the difficult groups," we conclude that the acceptability of social media among ulama in the Ogan Ilir district is positive. The positive means that ulama do not antipathy toward ICT developments. They adapt and adopt ICT to support their everyday life. Qualitative data identifies some social media functions for ulama in Ogan Ilir District, namely: an instrument for

gathering, seeking and sharing information, promotion goods and services, communication tools (personal, community, and organization), preaching, and socializing. However, some ulama still do not use social media because they feel uninterested, spend time, avoid negative content, and their smartphone is not compatible with social media applications.

Supporting and inhibiting factors

Based on qualitative data analysis, we identified several supporting factors that triggered the adoption of social media among *ulama* in the Ogan Ilir District. *First*, *ulama* feel the real benefits from social media applications. Among these benefits is to tighten social bonds, share information, promotion of goods and services, communication tools (personal, community, and organization), preaching, and socializing in cyberspace. "Da'wah could be performed by speech (*bil lisan*) and by doing (*bil hal*). For me, teachings Islam through social media is also included in the category of *da'wah bil lisan*," said L11 (Interview, L11, 06/09/2017). Some *ulama* are also involved in businesses activity, such as travel services for pilgrimage, printing, and trade. "Facebook and WhatsApp make it easy for me to disseminate information related to my business. Facebook and Whatsapp make me easier to sell products and services more widespread, no longer limited to the place where we live or work," said L12 (Interview, L12, 08/09/2017)

Second, *ulama* feel safe and comfortable using social media. Until now, they have not experienced any adverse events, material or non-material, caused by misuse of social media accounts by irresponsible people. "In the past, Facebook is not very secure if we access it through internet cafes. However, the era of internet cafes is over. I am sure, now everyone is updating their status via smartphone", said L8 (interview, L8, 07/09/2017). *Third*, network quality. Although Ogan Ilir District has been serviced by all mobile communication service providers, only the Telkomsel network with 4G status. Other service providers' networks, such as XL and Indosat, still use 3G networks. "Connecting to the internet is dependent on the type of sim card, data packet service, and type of smartphone. For example, your device supports 4G network and subscribing monthly data packets, but if the network in our location is still 3G, so it is useless", said P6 (interview, P6, 09/09/2017).

Fourth, the concept of jihad in cyberspace. The production and distribution of information in the internet world are unlimited. However, not all information contains truth and trusted. Hoax information is a term often used by internet users to call incorrect information, misrepresentation, and false news. This hoax information becomes necessary to fight when it comes to Islamic teachings. He became one of the triggers of ulama to participate in social media. As one informant put it, sometimes I received information about hadiths through WhatsApp. After I recheck it, it is a false hadith. You can imagine if such information spreads quickly and is consumed unfiltered by ordinary people. For me, it is our duty as ulama to validate and verification Islamic knowledge on the internet", said L7 (interview, L7, 11/09/2017).

Furthermore, several factors deterring social media adoption among the ulama. *First*, the availability of time to operate social media. Most informants are Islamic boarding school teachers who also serve as religious speakers. Their activities as teachers are very crowded because they should manage various activities in the school environment. *Second*, although Facebook and WhatsApp allow data communication processes in time and real-time, audience responses are often

not on time and in real-time. “To be honest, I prefer to call if I want to communicate with friends or family. It is more expensive but I am satisfied because the information is faster than chatting or SMS (short message system) and we should not wait. Waiting is very boring”, said L3 (interview, L3, 04/09/2017)

A third factor contributing to inhibiting the adoption of social media among ulama is the phenomenon of negative content, especially pornography. "Social media, especially Facebook, is like a crowd. Everyone with diverse backgrounds, goals, and motivation is there. People who have good moral and bad morals stay on Facebook. Islam firmly states that we should choose friends selectively. To avoid meeting with individuals who are not good morals, I decided not to use Facebook. I think it is better to have a few offline friends but real than having a lot of friends online but not authentic. It is unclear who they are", said P1 (interview, P1, 06/09/2017). The fourth factor is avoiding an addictive situation. "Social media makes a person continue to connect with other people online, not once but many times. Somehow, I want to keep doing it again, again, and again. When I connect, I am spending my money. I think it would be better if I spend my time for more productive activity rather than reading status, posting or replying to my friends' posts. For me, offline friendship is more genuine", said P5 (interview, P5, 12/09/2017).

The fifth factor is the internet cost. For ulama who have an additional business, Internet data packets are not a serious problem. They are willing to subscribe to monthly data packages because it allows them to market their products and services into their wares. A similar situation is true for ulama who have received teacher professional allowance. However, for ulama who have not received it, subscribing to internet data packages on an ongoing basis is quite burdensome. "The data package is only purchased if it is needed. My number to call and SMS does not change. However, numbers that have data packets are always changing. Because buying a new number that contains data packets is more profitable than filling the data packet using the old number ", said L6 (interview, L6, 10/09/2017).

Discussion

The ownership, access, and social media usage among ulama in Ogan Ilir District indicate the continuity of mobile religiosities(Barendregt, 2009) phenomenon that arose early in the development of cellular phones in Indonesia. However, the form of mobile religiosity is shifting due to the development of information and communication technology innovation. Today, some of the phenomena observed as indications of mobile religiosities, for example, Islamic ringtones and religious messages, are no longer popular among smartphone users. The rapid innovation in smartphone hardware, Android software, and the creativity of Android-based religious app developers allow smartphone users to express their religious beliefs more varied, whether in text, images, sound or video.

A wide range of Android-based social media facilitates religious information traffic massively. Because religious knowledge is no longer exclusively stored in the ulama's memories but is already in a public space accessible to everyone, then - said Turner,(Turner, 2007) ICT is “disrupting and challenging” ulama's religious authorities. In our opinion, this argument is not entirely correct. This study shows how ulama adopt and adapt to the development of ICT and positioning themselves as a guardian of the religious information traffic in cyberspace. Because religious knowledge of the ulama is integrative and comprehensive, their role is increasingly needed to validate the various

religious information produced, distributed and consumed by ordinary users (non-ulama) who have partial knowledge about Islam.

In our mind, extensive religion knowledge spread over the internet remains incapable of destabilizing the authority of ulama. In Indonesia, ulama is not only about the possession of comprehensive religious knowledge, but also about the figure which is considered noble because of moral stability, quality of the faith, and upholding the principle of genuine life.(Dhofier, 1980; Kafid, 2014; Siregar et al., 2013) Ulama are rooted sociologically, historically, politically and still have a significant role in the process of modernizing economic and political life in Indonesia. Under this situation, we believe, it is hard for ICT to undermine the authority of ulama.

In contrast to Hall's (2016) argument which said that social interaction through social media tends to talk-focused, one-on-one exchanges with closer relational partners, and rarely undifferentiated, broadcasted, or passively consumed information shared with acquaintances, we find that broadcasting is a modern technique used by ulama to spread of da'wah message. They choose this strategy because of its ability to reach more audiences. Ulama, with their religious knowledge, do not passively consume information from social media. Instead, they actively criticize religious information circulating on social media.

We agree with Bobkowski (2013) who said that one is unwilling to use social media because of unstable economic factors, education factors, lack of support from people and friends, lack of leisure time, low skills, and unwilling to maintain social contact with ICT device. In addition to these factors, negative content and avoidance of addictive situations also contribute to one's decisions, especially those who work as ulama, to use social media. Our research results also corroborate the findings of Kurtuluş et al., (2015) which states that not enough users act as original content creation. In our opinion, this situation is created by the extensive information about Islam in social media, sharing features owned by some religious applications, and the low digital skills of the scholars.

In the context of the TAM, this study reinforces the previous findings that are showing theoretical powers of TAM to explain the process of technology adoption at individual or group level who share a common social role. Specifically, the ulama's argument about "*jihad* in cyberspace" reinforces the contribution of subjective norms in the TAM model as identified by Taylor & Todd (1995b) and Venkatesh et al., (2003). Ulama feeling secure, comfortable, and get the real benefits when using social media is in line with the findings of previous researchers regarding the level of short-term use (Chau, 1996), user satisfaction and privacy (Lim et al., 2013). Incompatible hardware amplifies compatibility issues (Chau & Hu, 2002) in the social media adoption process. Finally, the ulama's efforts to avoid pornography and the addictive situation are risk manifestations that also contribute to the TAM model (Pavlou P.A., 2003).

Conclusion

Ogan Ilir is one of the districts that have the oldest tradition of Islamic boarding school in South Sumatra Province. Although the number of pesantren in this regency is significant, no ulama in this region performs da'wah in the digital world using social media. This article aims to describe the pattern of access, ownership, social media usage, and analyze the supporting and inhibiting factor that contributes to social

media adoption among ulama in Ogan Ilir District.

We conclude that social media acceptability among scholars in the Ogan Ilir district is positive. Using social media has become the new identity of the ulama. Facebook is the most popular social media among them. They use social media to broadcast a da'wah message. However, no ulama producing their da'wah message. For ulama, social media is a tool for seeking and sharing information, promoting goods and services, and personal communication, preaching and socializing. Supporting factors that trigger the adoption of social media among ulama are safety, comfort, real benefits, network quality, and jihad in cyberspace. Involving the inhibiting factor of social media adoption is the availability of time, audience response, negative content, addictive situations, and the internet cost.

Finally, we realized that this research is not perfect. Ulama is not a homogenous entity. Our informant is too small to be a basis for generalization. However, we show that the relation between ulama and ICT is fascinating topics that need attention from various social sciences. During this project, we find a different form of mobile religiosity which required scientific explanation. For example, our informant tells us about how WhatsApp promote Alquran recitation online group among Muslim in Indonesia and online Islamic teaching. Another source tells us about how social media are facilitating effective communication and coordination among "212 movements" supporter. In Indonesia, as indicated by the closure of the Telegram application some time ago, social media has been related to the terrorism issue. This phenomenon is beyond our research objectives and required attention from social science scholars.

From a practical perspective, we recommend the Government of Ogan Ilir District, the Office of Departement of Religious Affairs at Ogan Ilir District, and the Indonesian Ulama Council of Ogan Ilir District to improve the digital literacy of ulama in maximizing social media as mass communication tools. We also suggest the Indonesian Ulama Council (MUI) of Ogan Ilir District design a preaching program for social media user.

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The Student Learning Activity Levels on the Online Learning During the Covid-19 Pandemic: a case study at Al-Amin Muhammadiyah Boarding School of Bojonegoro

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Article history
Received 10 February 2021
Revised 21 Februari 2021
Accepted 11 Maret 2021

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DOI: 10.35316/jpii.v5i2.289

Abstract: Online learning was a problem solving during the Covid-19 pandemic. Al-Amin Muhammadaiyah Boarding School (MBS) of Bojonegoro as one of the educational institutions under the auspices of Muhammadiyah was consistent and obedient to the decision of both central and regional governments to eliminate offline learning as an effort to reduce the spread of the Covid-19 virus. The implementation of online learning at Al-Amin MBS of Bojonegoro had used google classroom, zoom and whats app application. The effectiveness and efficiency of online learning can be linked to the level of student learning activities related to attendance, doing assignments, discussions and others. The purpose of this study was to determine the level of student learning activity and the treatment strategies or treatments of Al-Amin MBS in the implementation of online learning. This study used a qualitative approach with survey research type. The data analysis used a quantitative descriptive method. The results showed that the level of student learning activity was in the active or good category. The treatment strategies or treatments prepared by Al-Amin MBS of Bojonegoro in online learning were reducing the duration of lesson time and requiring teachers to make a resume of each learning material.
Keywords: learning activities; MBS; online learning; Covid-19.

Introduction

Significant changes in the implementation of learning occurred during the Covid-19 pandemic. The basis for learning implementation which is dominantly done by offline framework with a face-to-face system is carried out in the classroom that has been replaced by online mechanisms. The formality of learning from home in responding to the Covid 19 pandemic is stated in the Ministry of Education and Culture circular letter number 15 of 2020 as a reinforcement of the Minister

of Education and Culture circular letter number 4 of 2020. This condition causes various problems related to factors that can affect the learning itself start from the ability of schools to facilitate online learning, the ability of teachers, the media used and the level of awareness and resilience of students in online learning (Bistari, 2018).

Referring to the several research results related to the influence of the Covid-19 pandemic, it explained that the level of tension, anxiety and worry showed in a high percentage. They are 59% or 26 of 44 respondents. Meanwhile, the level of difficulty of clearly think is 50% or 22 from 44 respondents (Iqbal & Rizqulloh, 2020) Other studies also provide indicators of mental health conditions for adolescents who show abnormal symptoms that quite high in hyperactivity and problems with peers, especially those related to interaction and socialization (Choirunissa et al., 2020). Referring to this fact, apart from many factors that affect, psychological conditions either directly or indirectly can affect the level of boredom in learning which will directly impact the learning outcomes (Fiorilli, et.al, 2017; Kim, et.al, 2018; Lee & Lee, 2018).

Learning as a core process in education basically must be carried out comprehensively. Learning does not only develop and improve the cognitive aspects but also in the affective and psychomotor domains. Referring to the theory, it becomes a necessity that in the learning process, good interaction between teacher and students as the core elements of the learning process is highly needed. This fact cannot be separated from their position as an essential and fundamental element in the implementation of learning activities. The failure of a synergistic relationship between the two, not only can not achieve effective learning but also make the level of learning activities low (Frymier & Houser, 2000; Lessard et al., 2010; Roorda et al., 2011; Spilt et al., 2011; Zamili, 2021)

The high and the low level of learning activities can be used as an indicator of the quality of the learning process implementation both offline and online. The level of student learning activity during the Covid 19 pandemic causes various problems ranging from the accuracy of determining and using online applications for learning, controlling the development of learning outcomes and others. The ability of schools or educational institutions in implementing online learning is able to reduce the level of boredom in learning and able to realize the learning outcome which becomes the goal. Learning activities are theoretically an active action of student activity to respond the learning process. This response is a process of student interaction as a raw input with instrumental and environmental inputs in the teaching and learning process (Purwanto, 2007). Learning which includes several components such as teachers, students, materials, methods and others (Pane & Dasopang, 2017) is associated with its activity form, including visual, oral, listening, writing, drawing, motor, mental and emotional activities (Astuti et al., 2019).

In online learning during the Covid-19 period, learning activities are a dimension that must be measured and controlled properly and comprehensively. Student learning activities become a barometer of services provided by schools/educational institutions. The high level of learning activities illustrates the commitment of executors and actors in learning. The implementation of strategies, methods, and models that are part of learning planning becomes the means of stimulating student learning activities. In line with this description, the concept of currently learning is no longer teacher-centred but becomes student-centred in which the teacher is only a facilitator and mentor. This condition

provides opportunities for students to develop their abilities such as expressing opinions, thinking critically, conveying ideas and so on. Active learning is very much needed by students to get maximum results, especially in this online learning process era. The level of student independence in learning is a necessity that must be able to be guided and realized by the school through the role of the teacher.

Al-Amin Muhammadiyah Boarding School (MBS) of Bojonegero based on the results of pre-research observations is currently also implementing an online learning process. This policy is a form of Bojonegroro Al-Amin MBS obedience and compliance in responding to the circular letter from the Minister of Education and Culture and the Ministry of Education and Culture regarding the learning from home policy, as well as the policy of the Bojonegoro Regent that there should be no offline learning activities in educational institutions during the Covid-19 pandemic. On the other hand, the policy of Al-Amin MBS of Bojonegoro to organize online-based learning also refers to the decree issued by PP Muhammadiyah as the parent organization number 02 / MLM / 1.0 / H / 2020 regarding the Covid-19 outbreak.

The process of implementing online learning at Al-Amin MBS of Bojongero is in fact carried out in line with the 2020/2021 school year starting on July 1, 2020. The online learning process of Al-Amin MBS of Bojonegoro uses applications such as google classroom, zoom meetings, google meetings and other social media facilities such as WhatsApp which is used as a communication and interaction space to support the smoothness of the online learning process. In connection with the learning schedule, Al-Amin MBS of Bojonegoro reduces the standard lesson hours from 45 minutes to 30 minutes starting at 07.00 to 12.00. Another policy carried out by Al-Amin MBS of Bojonegoro in supporting the implementation of online learning is by sending and preparing course textbooks to be given to students. Referring to the observation result description about the planning of online learning process done by Al-Amin MBS of Bojonegoro, Al-Amin MBS of Bojonegoro is very decent to be a research object to observe the preference of students' learning activity level because before covid-19 pandemic the learning process which uses boarding school system can be totally controlled even during 24 hours in a day.

There are several studies regarding student online learning activities that have been done during the Covid-19 epidemic. The research focusing on online learning activities analysis during the Covid-19 epidemic whose research subjects are university students shows that the level of learning activity is in the fairly good category (Hasanah et al., 2020). Moreover, the research result on increasing activity and online learning outcomes by using Google Classroom whose respondents are school students describe the activity level is about 75.83%. Regarding that study, there is also an increase in learning outcomes whose grade of completeness percentage is about 90.27 (Sutrisno, 2020). Other research done during the Covid-19 pandemic era dominantly focus on its impact on the process of online education and only focus on one subject. They have not measured the overall perspective of the students yet.

Referring to the description above, the research focusing on a survey on the level of online learning activity for Al-Amin MBS of Bojonegoro students is very appropriate. Apart from the continuation of cooperation, the characteristics of the respondent, the educational model, the treatments carried out different from several studies that have been conducted. This study did not limit the learning process to one subject but focused on surveying the learning activities of Al-Amin Bojonegoro students. Another difference is in

the characteristics of the respondents and the education system which based on the boarding school model whose system is normally done by using the offline system.

The focus of this research which also becomes the research problem is how the level of student learning activity during the Covid-19 pandemic at the Al-Amin Muhammadiyah Boarding School (MBS) of Bojonegoro is. The main purpose of this study is to determine the level of student learning activity at Al-Amin MBS of Bojonegoro and to find out the Al-Amin MBS of Bojonegoro strategy in implementing online learning during the Covid-19 pandemic.

Research Method

This research uses a quantitative approach whose type is a survey. The research place is in Al-Amin MBS of Bojonegoro as one of the Islamic boarding schools under the management of the Muhammadiyah organization. The research instrument used an online questionnaire (Nazir, 2014), with a google form application containing 11 research statements about learning activities. Model of data collecting with a cross-sectional model (Creswell, 2015). The research respondents are 286 students or they are 90.2% of the total students. Moreover, the data analysis used a quantitative descriptive method.

Results and Discussion

An online survey regarding online student learning activities at Al-Amin MBS of Bojonegoro is an alternative process to conduct research in the midst of the Covid-19 pandemic outbreak. This survey used 286 students as respondents they are 226 male students (79%) and 60 female students (21%). The distribution of respondents in detail is presented in the following table:

Table 1. Distribution of Respondents Based on Class and Gender

Class	**Gender and Percentage**				**Total**
	Male	**%**	**Women**	**%**	
1	53	18.5	36	12.6	89
2	48	16.8	24	8.39	72
3	49	17.1	-		49
4	26	9.09	-		26
5	26	9.09	-		26
6	24	8.39	-		24
total	***226***	***79***	***60***	***21***	***286***

The results of research on student online learning activities during the Covid-19 pandemic described as follows:

1. Attendance/participation of students in online learning.

Based on the results of the student questionnaire related to the level of student attendance in the implementation of online learning, there are 120 students who answered "always follow", 111 students answered "often follow", 49 students answered "sometimes follow", 11 students chose "rarely follow", while for "never follow" is none. The students who answer "always" and "often follow" are categorized as active. The percentage is 79% or there are 227 students. Meanwhile, those who answer "sometimes" and "rarely" are categorized as passive. The percentage is 21% or there are 59 students. This data explains that the level of attendance or participation of students in online learning is in the active or good category.

The data of attendance or participation level is strengthened by the data that got from student questionnaires in following online learning activities until the learning is finished. Based on the data recapitulation, there are 93 (32.5%) students who attend and follow online learning until it is finished, 120 students (42%) often follow, 63 students (22%) sometimes follow and 10 students (3.5%) rarely follow.

Measuring the level of student discipline in taking online learning until the learning process finished is important because it can see the synergy between aspects of attendance and the participation of students to follow the learning until it is finished. The attendance aspect which is an active category reached 79% while those who attended the learning until it finished, were 74% so there is a difference between them is 5% or 14 students. These data can be used as an affirmation that the attendance and students' participation to follow the learning until it finished has good harmony. It was shown by the level of difference which is still in the fair category.

2. Doing or completing and collecting assignments/ homework.

The students' answers regarding this statement can be described as follows: 62 (21.7%) students always do, 129 students (45.1%) often do, 84 (29.3%) students sometimes do and 11 (3,9%) students rarely do. Referring to the data and pictures, there are 191 (67%) students categorized as active students. They are the students whose answers always and often. While there are 95 (33%) categorized as passive. They are the students who answer sometimes and rarely. Moreover, there are no students who answer never do. Those 191 (67%) students illustrate that the awareness of students to do their assignments/homework is good.

Regarding the data of student discipline level in collecting assignments/homework based on the time determined by the teacher, there are 34 (11.83%) students who are always being on time, 115 (40.29%) students who are often being on time, 35.66% (102) students who are sometimes being on time, 31 (10.83%) students who are seldom being on time and 4 (1.39%) students who are never being on time. Referring to the data stated in the figure above, the active students who are disciplined in collecting assignments reached 149 students (52%). While the passive students who were from sometimes, rarely and never group reached 137 (48%) students. The data description explicitly illustrates that the discipline of the majority of students in collecting assignments in online learning is good.

The level of student activity in online learning which is categorized as active or good above cannot be separated from the role of the teacher in teaching and learning activities. The role of the teacher in reminding students' assignments/ homework that must

be done and collected. Based on the respondents, 33% or 95 students felt that they were always reminded, 111 (39%) students felt that they were often reminded, 60 (21%) students felt sometimes reminded, 12 (4%) students felt rarely reminded and 8 (3%) students felt never reminded.

3. *Murojaah* in memorizing Qur'an

Murojaah or memorizing the Qur'an is done in several ways namely doing in front of the teachers by using video calls directly or utilizing video recordings sent via google classroom or WhatsApp. This activity is a superior activity for increasing the quantity of students' Qur'an memorization. The survey results show as follows, 155 (54.2%) students always *murojaah*, 78 (27.3) students often *murojaah*, 44 (15.4%) students sometimes *murojaah*, 7 (2.4%) students seldom *murojaah* and 2 (0.7%) students never *murojaah* The data can be classified that the percentage of active students in memorizing the Qur'an is 81.5% (233 students). While the percentage of passive students is 18.5% (53 students). The *murojaah* aspect of memorizing the Qur'an is still carried out by using an online system that can be categorized as good.

4. Memorizing *mufrodats* / vocabulary

Memorizing *mufrodat*/vocabulary as a factor to support student excellence in achieving fluency in using English and Arabic is an activity that must be done during online learning. For student memorization activities, monitoring is done by video calling or sending recordings to the supervisor. The level of achievement of this activity in the category of always memorizing reached 36.1% or 109 students, often category reached 26.6% or 76 students, sometimes category reached 23.8% (68) students, rarely category reached 8.7% (25) students and never category reached 2.8% or 8 students. Referring to the description and data visualization above, it can be grouped that active students are 213 (74.5%) and passive students are 25,% or 73 students. This fact can be referred to the conclusion that students' activities in memorizing *mufordat* / vocabulary in English and Arabic are good.

5. Asking Activity

Asking activity is a part of oral activities. The data descriptions related to this aspect can be visualized as a basis for describing student activity in online learning in quantitative data. Referring to the image data above, there are 35 (12%) students always asked questions, 50 (17%) students often asked questions, 100 (35%) students sometimes asked questions, 73 (26%) students rarely asked questions and 28 (9.8%) students never asked questions. This questioning activity is more conical to the problems faced when online learning is carried out. It is related to difficulties or lack of understanding in the learning material received by students. Based on these data, the level of awareness of students whose answers are always and often asked are categorized as good and there are 85 (29.72%) students of it. While for the moderate category there are 100 students (34.96%) and for the less category, there are 101 students (35.32%).

6. Discussion

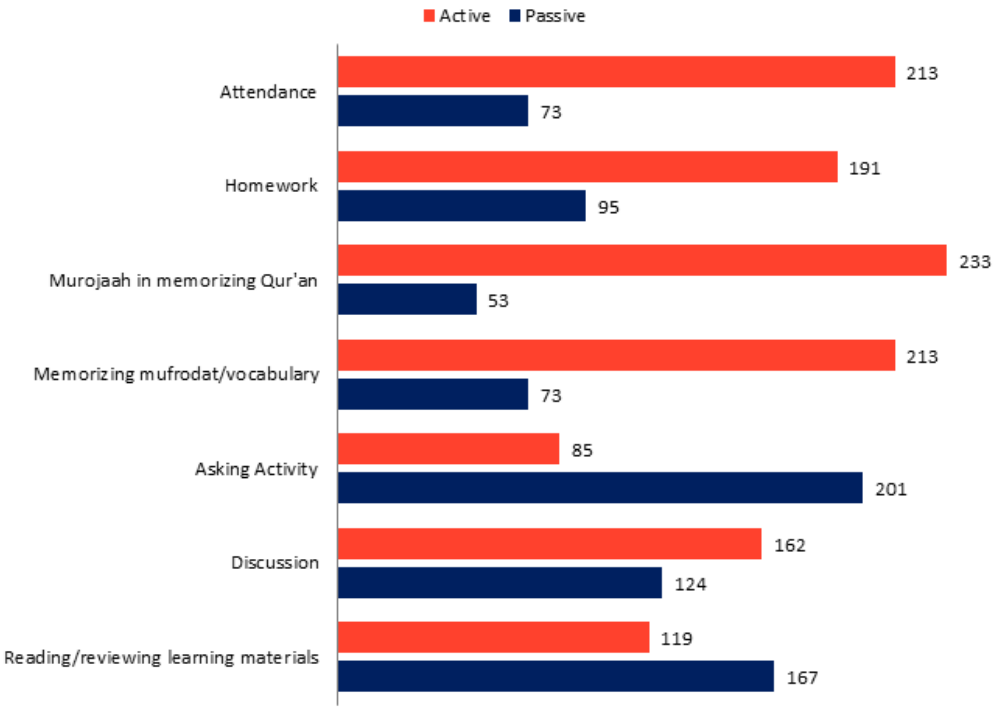
Discussions are part of listening activities. These activities of the students of Al-Amin MBS of Bojonegoro during the online learning can be the condition of students who always follow is 24% or 68 students, often follow category is 33% or 94 students, sometimes follow category is 88 (31%), rarely follow category is 20 (7%) and never follow category is 5% or 16 students. This description can be grouped as follows: there are 162 (56.64%) students categorized as active students, while for the passive category there are 124 students (43.36). This percentage indicates that student involvement in the discussion can be categorized as moderate or good enough.

7. Reading/reviewing learning materials

Reading or re-studying the learning material is a learning activity in the type of visual activities. This activity is the dominant domain to help students to achieve good learning outcomes. Student activities data in reading or re-learning the material obtained from the online learning are as follows: there are 31 students for always category (10.84%), 88 students for often category (30.77%), 113 students for sometimes category (39.51%), 45 students for rarely category (15.73%) and 9 students for never category (3.14%). The data description can be grouped into two categories, namely the active and passive category. The active group was represented by the students whose answers are always and often category with the total amount are 119 students or (41.61%). Whereas, the passive category got from the students whose answers sometimes, rarely and never with the total amount are 167 students or (58.38%). The active student's category has a smaller percentage than the passive category. Based on this percentage data, this activity can be said as a bad category.

Based on the data, there are several students activities of Al-Amin MBS of Bojonegoro in online learning during the Covid-19 pandemic including the attendance activities or student participation in online learning supported by the data of students that follow the learning process until it finished, completing and collecting the assignments/homework, *murojaah* Qur'an material, memorizing mufrodat/vocabulary, asking questions, discussing and reading or re-learning the learning material. Each of those aspects is categorized as active and passive. It can be visualized in the following diagram:

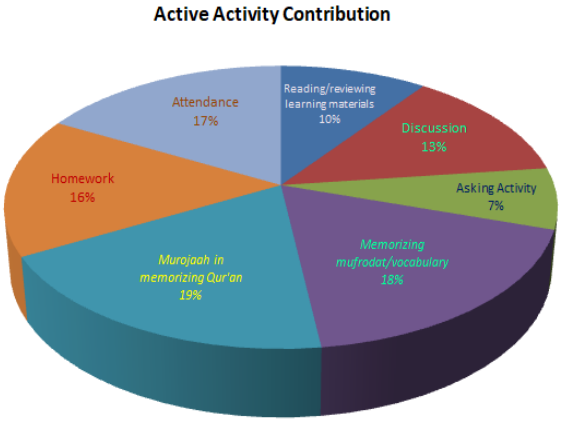
Figure 1. The number of active and passive students during the online learning



Referring to the data visualization in the diagram, the active category of the activity level from the highest to the lowest number can be ordered as follows: *murojaah* Qur'an activities (233 students), memorizing activities and attendance (213 students), completing and collecting assignments / homework (191 students), discussion

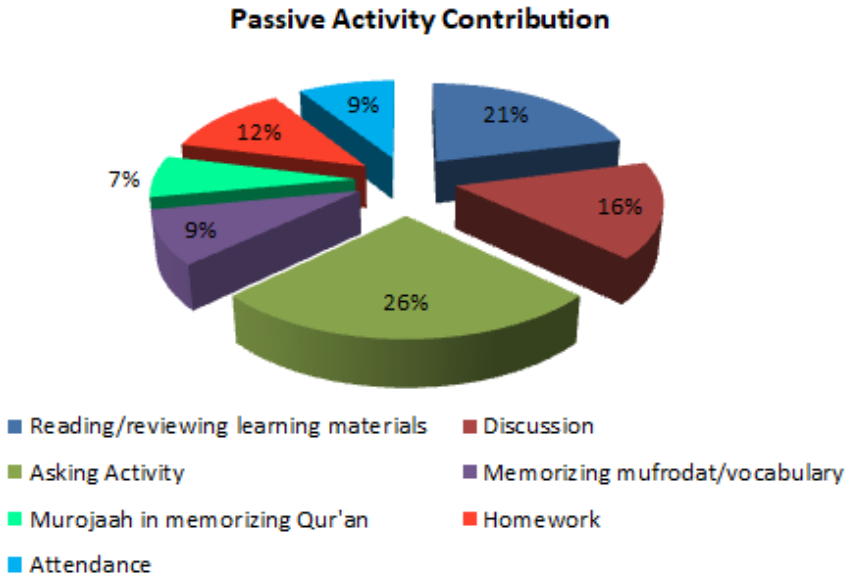
activities (162 students), reading activities (119 students) and asking questions activities (85 students). From this data description, it can be built a visualization to see the contribution of each activity, as shown below:

Figure 2. Contribution Percentage of Active Categories of Each Online Learning Activity



The data in the image above explicitly shows that the highest percentage is contributed by *murojaah* activities and the lowest percentage is on the questioning activity done by the students if there is a difficulty to understand the learning material. The opposite of the active category, the passive category of asking activities has the largest contribution while the lowest contribution is the activity of *murojaah* Qur'an material. The detail of these data can be seen in the following figure:

Figure 3. The Contribution of Passive Category Percentage of Each Online Learning Activity



Based on the data above, it can be explained that student activities, especially those related to asking activity have a fairly high passive level that is 26%, while the

second is reading activity which reaches 21%. The total percentage of both aspects is 47%. Accordingly, it can be interpreted as a dominant-negative activity in the implementation of online learning at Al-Amin MBS of Bojonegoro.

Looking at the data that has been presented, it can be concluded that the overall student activity is in a good category. Other data related to the treatments done by Al-Amin MBS of Bojonegro in the implementation of online learning are apart from the formal teaching and learning activities, Al-Amin MBS of Bojonegoro also implement other activities which are also carried out by an online system such as the 1st Muharram commemoration, anniversary of Indonesian Republic independence day, Muhammadiyah anniversary and other extracurricular activities such as *muhadharah* and class meetings. This conditioning can directly affect student motivation to participate in online learning activities. On the other hand, to increase the effectiveness of learning, Al-Amin MBS of Bojonegoro requires every teacher to make a resume or summary of the learning materials as their teaching materials distributed to students. This is real, although the duration of the learning time in the online realm is only 30 minutes, the learning process can run effectively and efficiently. In general, this context can refer to the Skinner concept known as operant conditioning (Zaini, 2014).

Referring to the theory of learning activities, from the results of this study, it can be stated that the aspect of student attendance can be included in emotional activities, doing and collecting assignments/homework can be included in two domains, namely writing and drawing activities, *murojaah* and memorizing activity are included into mental activities related to the memory process, discussion and asking activity are part of oral activities and reading is a part of visual activities. The level of learning activity cannot be separated from its role as an indicator of effective and efficient learning, including the online learning process (Bistari, 2018). The implementation of online learning must be managed well and systematically, this is because distance learning which is the basic concept of it requires comprehensive planning ranging from methods to teaching materials. Finally, effective and efficient learning can foster independent learning as a facilitator to foster good student learning activities (Nindiati, 2020; Wijaya, 2015).

Apart from the equalization of education access, the basic purpose of online learning or distance learning is to create Student independence in learning. Online learning must also consider the media, tools, applications and other devices used in its implementation. Online learning activities at Al-Amin MBS of Bojonegoro which use google classroom, zoom, WhatsApp media, can be used as one of the factors that affect student learning activities which are categorized as good or high. This is in line with several research results related to the use of these facilities and media in the implementation of online learning, especially WhatsApp. WhatsApp application is used by Al-Amin MBS of Bojonegoro for student facilities in *murojaah* whose percentage of learning activity is high or good (Bergdahl, Fors, Hernwall, & Knutsson, 2018; Barhoumi, 2020). The treatment of Al-Amin MBS of Bojonegoro in supporting the process of implementing online learning is addressed with the necessity for teachers to make a resume that can be used as teaching materials. The function of teaching materials is as a means to facilitate the learning process to be effective (Perwitasari et al., 2018).

Based on the data research, the level of student learning activity in the implementation of online learning which is categorized as good can be related to the role of the teacher. The dynamics of the relationship and communication of teachers

or schools is reflected in the implementation of non-formal and extracurricular activities carried out by Al-Amin MBS of Bojonegoro. Although independent learning has become an orientation in online learning and there is a paradigm shift in the context of student-centred learning, the role of teachers is still cannot be ruled out. The role of teachers in online learning is important. Besides increasing the activity and learning outcomes, it also overcomes student saturation levels both physically and psychologically in taking online learning (Akiba & Liang, 2016; Paloș, Maricuţoiu, & Costea, 2019; Friedman, 2014). The treatments which are done by the school by reducing the duration of lesson hours and making the obligation for teachers to develop teaching materials in the form of resumes or handouts become a problem solving to overcome problems faced by students in achieving the learning goals. This can be seen clearly in the aspect of reminding the students to do and collect their assignments/homework so that the percentage achievement of the active category of this aspect reaches 66.8%.

School policies and the role of teachers have a good impact on student learning activities in online learning. There are two learning activities that have an active percentage or good category namely, *murojaah* memorizing the Qur'an and memorizing *mufrodats*/vocabulary. These two aspects are a collaboration of the dimensions of student-centred learning and the role of the teacher as the facilitator of learning. *Murojaah* memorizing the Qur'an achieved 81.5% or there are 233 students, while the *mufrodat*/vocabulary memorization activity was 64.7% or there are 185 students. This good level of activity is in line with the dimensions of excellence that are the focus of Al-Amin MBS of Bojongoro namely, the target of memorizing 30 juz of the Qur'an and practising daily communication by using English and Arabic. Those two aspects are the supporting component to realize the excellence goals of the school.

The treatments that are also applied based on the results of interviews with Al-Amin MBS caregiver of Bojonegoro in the implementation of online learning activities are instructing the teacher to conduct periodic evaluations related to the online learning implementation every month. This evaluation process is significantly able to control and position the implementation of online learning to be always on the appropriate track with the educational services so that the real impact can be seen at the level of active or good learning activity of Al-Amin MBS students. In short, Al-Amin MBS of Bojonegoro maintains and fosters student learning activities in online learning by organizing all activities which are usually done in offline conditions.

Conclusion

Based on the formulation of the problems and the objectives that have been formulated, the results of this study can be concluded as the level of learning activity of Al-Amin MBS of Bojonegoro students in online learning is good or active, especially in the activities of memorizing the Qur'an and memorizing *mufrodat*/vocabulary. The treatment strategy or treatment carried out by Al-Amin MBS of Bojonegoro in online learning includes reducing the duration of lesson hours, requiring the teachers to make course material resumes, using flexible media such as google classrooms, zoom meetings and WhatsApp, organizing extracurricular activities routinely such as *muhadharah* and class meeting through online media.

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Combination of Synchronous and Asynchronous Models in Online Learning

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Article history
Received February 12, 2021
Revised February 28, 2021
Accepted March 25, 2021

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DOI: 10.35316/jpii.v5i2.301

Abstract: The implementation of an online learning system due to the Covid-19 pandemic had become a portrait of learning today and the future. Since March 2020 online learning implemented at IAIN Kediri demands the readiness of lecturers and students to adapt to learning. The researcher as one of the lecturers who was directly involved in online learning had implemented a combination of synchronous and asynchronous learning settings through several learning media. This article was a self-study with a qualitative approach to the researcher's experience in carrying out online learning for one semester. The main question of this research was how do lecturers optimize the student learning experience in online learning using a combination of synchronous and asynchronous models?. A preliminary survey of students at the beginning of the semester and a reflection at the end of the semester, researchers used as primary data sources to gain their insight into the online learning experience. Researchers found that this combination of synchronous and asynchronous models was proven to be more able to help students to be directly involved in learning activities and to feel a connection with their peers and lecturers. So that lecturers need to balance the flexibility provided by online space with the synchronous learning environment, according to the abilities and student needs, as well as providing meaningful and quality learning spaces to achieve planned learning objectives.

Keywords: online learning; synchronous; asynchronous

Introduction

Starting from the impact of Corona Virus Disease 2019 (Covid-19) which requires the application of distance learning at all levels of education from primary, secondary to tertiary education. As the policy of the Minister of Education and Culture through circular number 4 of 2020 concerning the implementation of education in the emergency period of the spread of Covid-19, the learning process is carried out from home through online learning which provides a meaningful learning experience, without being burdened with demands to complete

all curriculum achievements (Kemendikbud, 2020).

In the conditions of the Covid-19 pandemic, the curriculum is no longer the focus of education, because resilience is the key to supporting a coordinated, fast, successful and sustainable in the face of the Covid-19 pandemic or other emergencies in the future. All activities need to be awakened by implementing social distancing, physical distancing, working from home to school from home (Djalante et al., 2020).

In the scope of higher education, the Director-General of higher education also issued circular number 1 of 2020 concerning the prevention of the spread of Covid-19 which said that during the Covid-19 pandemic, every university needed to regulate work procedures and mechanisms for the learning, research, and community service process with an online system, remote office, and others, according to the conditions of each university. Furthermore, in preparation for the 2020/2021 academic year, a joint decree was issued with 4 Ministers, namely the Minister of Education and Culture, Minister of Religion, Minister of Health, and Minister of Home Affairs regarding guidelines for implementing learning during the Covid-19 pandemic that can be done through hybrid learning, online. and face-to-face with strict health protocols.

The director-general of higher education also explained that learning during this pandemic must meet several requirements ranging from preparation, implementation, and evaluating which are permitted by the local district/city government through the Covid-19 handling task force. The existence of the IAIN Kediri as one of the tertiary institutions in the city of Kediri has not yet obtained face-to-face learning or hybrid learning permits, so since March 2020 to date learning is still being carried out 100% online, as in the first circular letter of the Rector of IAIN Kediri Number 172/In.36/PP/09/03/2020 concerning efforts to prevent the spread of Covid-19 in IAIN Kediri.

IAIN Kediri periodically follows developments in the conditions and policies of the central and local governments in determining the implementation of academic activities and employee work systems. In connection with educational and teaching academic activities to date have been carried out online, concerning the Chancellor's Decree Number 368 of 2020 concerning guidelines for organizing online learning at IAIN Kediri during the Covid-19 pandemic.

Online learning during the Covid-19 pandemic in the IAIN Kediri environment was applied to all courses while still paying attention to the national higher education standards, utilizing communication technology media, and ensuring students obtain learning process services that meet graduate learning outcomes (LO) which have been set. To achieve this goal, the campus facilitates an online learning platform through the Learning Management System (LMS) and allows the use of other supporting platforms that are following the characteristics of course study materials.

Referring to the policies above, the researcher as one of the lecturers at IAIN Kediri must automatically adapt quickly to prepare online learning starting from planning, implementation to assessment. As a lecturer, apart from using the LMS from the campus, the researchers also decided to use synchronous and asynchronous combination models with various supporting platforms such as a blog, WhatsApp, google meet, zoom, youtube, and Instagram.

The decision to choose various learning platforms takes into account the characteristics of the course and the conditions of the students. At this stage, the researcher conducts a preliminary survey at the beginning of the lecture and asks questions such as, what media are used by

students? and what online learning models do students want? Then the researcher chose to design an online class for one semester with the synchronous and asynchronous combination model.

Various research studies in the field of education said the asynchronous model is a means to instil active student participation more flexibly, while the synchronous model is more often introduced as an optional means to engage students in discussions that are rapid exchanges (Yamagata-Lynch, 2014).

Through this self-study research, researchers frame reporting based on evidence from teaching experiences and student survey results during online lectures. This study also answers how lecturers (researchers) attempt to optimize the student learning experience in online lectures using this synchronous and asynchronous combination model.

Therefore, the findings of this type of research produce moderate generalizations that are moderate in scope and open to change but can be tested for confirmation or refutation in the future when new evidence is found (Payne & Williams, 2005).

Literature Review

This study is closely related to the concept of online learning, which is an evolution of distance learning as part of a distance education model. Distance learning is not a new educational model, historically starting with written courses, which evolved into formal higher education in the form of an Open University. The University of Wisconsin America is one of the universities that pioneered the concept of distance learning since 1891. The background of this distance learning is for busy workers, who live far from educational institutions, making it difficult to follow regular or face-to-face learning (Munir, 2009).

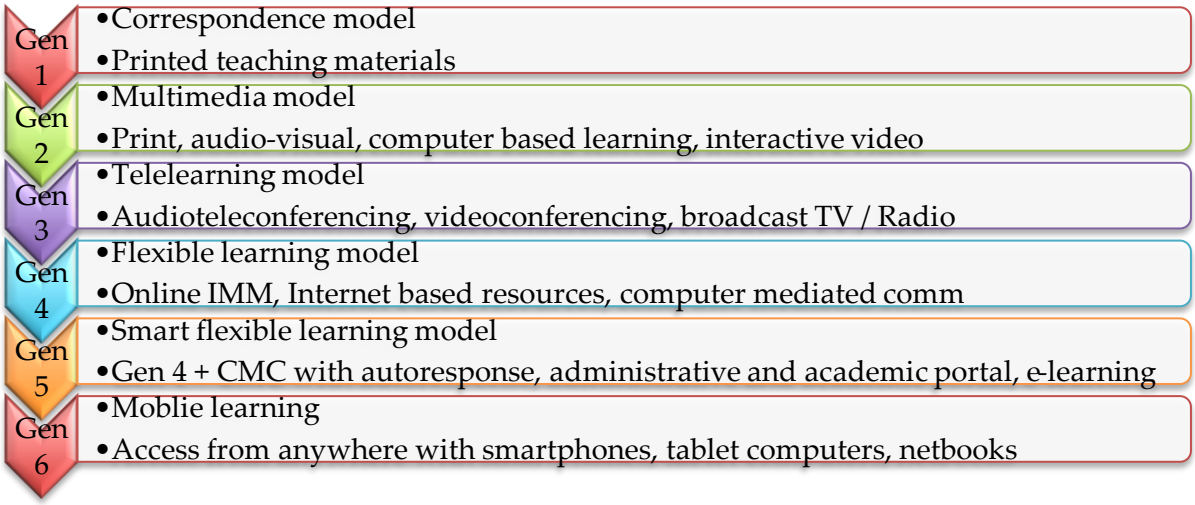
In Indonesia, distance learning has also been regulated in the National Education System Law Number 20 of 2003, which states that distance learning functions as an effort to provide educational services to community groups who cannot attend face-to-face education. This distance learning can be held in various forms, which still have to be supported by learning facilities and services as well as an assessment system that can guarantee the quality of graduates following national education standards.

Distance learning in the scope of higher education is also regulated by the Minister of Research, Technology and Higher Education Regulation Number 51 of 2018 article 1 paragraph 9, that distance learning is a teaching and learning process carried out remotely through the use of communication media. Distance learning is designed to facilitate learning services that are constrained by limitations on distance, place, and time to carry out the learning process. Therefore, distance learning has the characteristics of being open, independent learning, learning anywhere, anytime, and based on information and communication technology (ICT). Meanwhile, according to Keegan (1980) the characteristics that distinguish distance learning from regular learning are distance learning which includes; 1) separation between teachers and learners, 2) the influence of educational institutions/organizations, 3) the use of media that connects teachers and learners, 4) two-way communication takes place, 5) pays attention to learners as individuals who are learning, and 6) education as an industry (Munir, 2009).

Regarding the main learning media for distance learning, at first, it only used a correspondence model and printed teaching materials such as modules, but along with the development of ICT, various learning support media have been widely used, making it more possible for interaction

between educators and students, as well as improving services and quality of distance learning that is more effective and efficient. Moore (1993) proposes the limitations of distance learning as a learning method that provides opportunities for learners to learn separately from teaching and learning activities so that media assistance must be used to bridge communication between teachers and learners. Therefore, distance learning requires special techniques in designing learning materials, communication methods through various media and organizational management, and special administration as well. The development of distance learning from generation to generation can be shown in Figure 1 below:

Figure 1. Development of Distance Learning



Source: Kemenristekdikti (2016)

Distance learning will be much more effective if it involves interaction between teacher and learner, learner and learner, learners with media/learning facilities. So, the pattern of distance learning interaction also needs to be carried out interactively and using technology-based learning media to help build interactions face-to-face between learners and teachers as in regular learning. The point is that both distance learning and regular learning emphasize that distance education will be more effective if learners feel comfortable and motivated to learn through communication. Because without communication, learning will feel like indoctrination. Besides, the use of ICT in distance learning must also be considered to help facilitate communication and learning interactions.

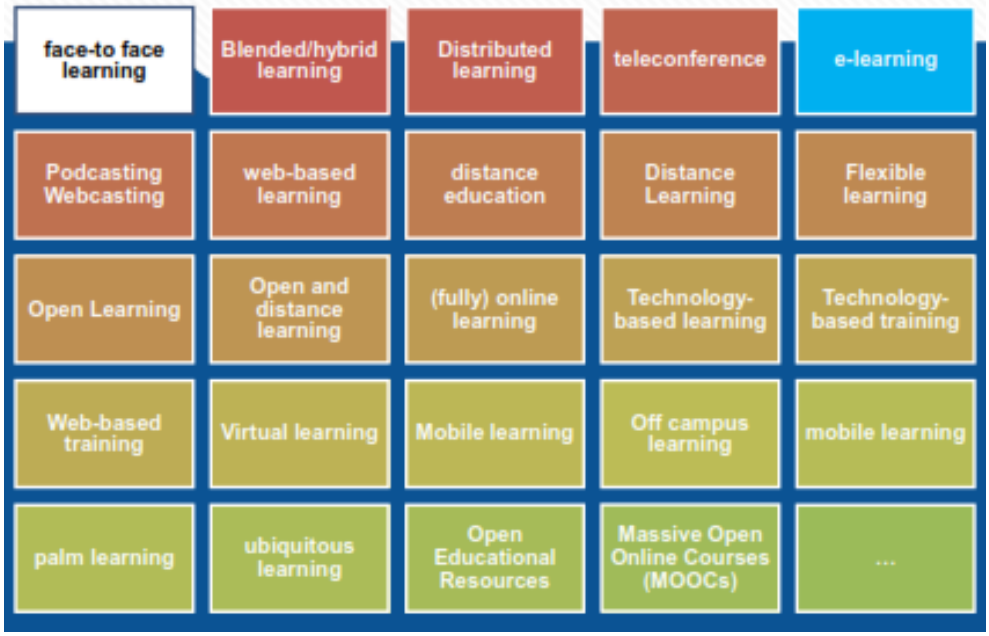
The presence of ICT has a very big role in providing direction for the development of distance learning. In current developments, especially since the Covid-19 pandemic, distance learning is mostly held with an online learning system that uses internet facilities. The use of the internet has increasingly created a very flexible learning situation and facilitates various learning media. Thus online learning is referred to as a method for making educational opportunities accessible to a wide range of audiences, which introduces teaching flexibility, and lowers education costs (Taplin et al., 2013).

Bonk Curtis J (2002) suggests that the concept of online learning is the same as electronic-based learning (e-learning), namely e-learning as instructional content or

learning experiences delivered or enabled by electronic technology (J. & Graham, 2002). Online learning is also defined as a large collection of computers in networks that are tied together so that many users can share their vast resources. Because online learning includes aspects of hardware that are interconnected and can transmit data, both text, messages, graphics, and sound, it also includes software aspects (Riyana, 2018).

Som Naidu in his book e-learning: a guidebook of principles, procedures, and practice also mentions several other terms such as online learning, virtual learning, distributed learning, network, and web-based learning which are widely used to describe e-learning. They all refer to educational processes that utilize ICT to mediate asynchronous and synchronous teaching and learning activities (Naidu, 2006). The development of the term distance learning shows the existence of an ICT-based learning spectrum as shown in the following figure 2:

Figure 2. ICT-based Learning Spectrum



Source: Kemenristekdikti (2019)

In essence, online learning is not limited to an electronic form of regular lectures. The online learning process focuses on students, empowers the independence of students, and refers to the principles of distance learning, which include (Ristekdikti, 2016) :

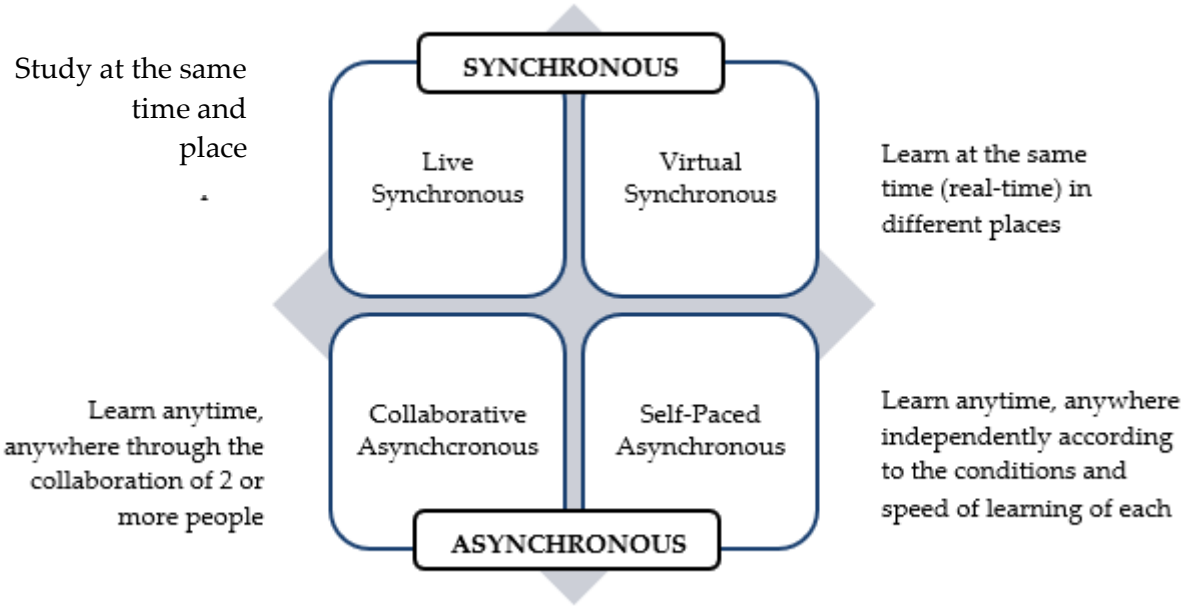
1. The existence of separation between educators and learners across space and time, so that emphasizes independent learning
2. Interaction ICT-based learning using a variety of sources and media
3. Organized systematically according to the rules
4. Strived for limited face-to-face presence.

These principles are applied in five aspects of online learning which include; 1) learning design, 2) learning activities, 3) delivery strategies, 4) learning media and technology, 5) learning assistance services. The five aspects are interconnected so that no aspect is omitted to carry out online learning to the fullest (Dirjendikti, 2014).

Online learning is also implemented by following e-learning modalities which

include: 1) individual and group learning processes, 2) online and offline learning processes, 3) synchronous learning processes (same time), and asynchronous (time difference). Online learning settings with these modalities can be more clearly described in the quadrant of learning settings as follows:

Figure 3. Quadrant of Learning Settings



Source: Adapted from Chaeruman (2013) by Intan NN Puspitasari (2021)

On the other hand, e-learning also has a continuum, which by Rashty (1999) classified into the following three categories (Chaeruman, 2019):

1. Adjunct is a traditional learning process supported by an online delivery system as additional enrichment. For example, to support classroom learning, the lecturer instructs students to find more information on the internet.
2. Mixed/blended is an online learning system as part of learning as a whole. Here the blended system does not place online delivery as an additional, but as an important factor in adjusting the relevance of the topic to the learning objectives, material, characteristics, and conditions.
3. Fully online, is a learning system where all interactions occur online. In fully online learning there is no face-to-face, but it is done virtually.

The learning settings and learning continuum above are the references for researchers to carry out online learning at IAIN Kediri for 1 semester, by applying the model collaboratively as will be explained in the findings and discussion of this study.

Research Method

This research is a self-study by taking a qualitative research approach. Researchers act as participant observers (Glesne, 2016) and take an important role in the design and instruction of the online learning process for 1 semester, namely the odd semester of the 2020/2021 academic year. Self-study is one of the well-established genres of educational research that has evolved over the past 15 years. In 1999 Zeichner recognized it as

having the potential to have a major impact on education and the transformation of teaching practice.

Self-study as investigation-guided research must be credible so that others can find that this research is meaningful and potentially generative about educational practice. This belief needs to be achieved by presenting data that clearly and can illustrate "methods for transforming the data into findings, and the linkages between data, findings, and interpretations" (Tidwell et al., 2009). In this self-study, the researcher works to ensure that the data collected is not just fiction, the researcher tries hard to look at the data systematically, to ensure that the researcher does not only pay attention to findings a support subjective expectations and desires. However, objectively ensuring interpretations that also supported by other people's interpretations (Garbett & Ovens, 2016). So this research is concerned about making personal knowledge public through rigorous and systematic qualitative methods (Loughran, 2007).

The role of researchers in self-study or the role of educators is closely related and generally inseparable. Here the involvement of researchers as lecturers teaching in the online lecture process relies on observations of the five elements of the methodology self-study which recommend that studies (a) start and focus on their own, (b) improvement the purposes, (c) interactive, (d) depend on several main qualitative methods, and (e) using example-based validation (Yamagata-Lynch, 2014).

So in this study, the researchers chose topics that were being studied and were useful, such as online learning that is very relevant to the current pandemic conditions. The quality self-study research requires researchers to sensitively balance subjectivity and objectivity as best as possible. The researchers also triangulated data by collecting data from various sources. The data source of this research is the results of a survey to students regarding the online learning experience. Researchers collected this survey at the beginning and end of the semester, totalling 133 responses. Other data also comes from the results of student assignments, recordings of synchronous and asynchronous discussion participation.

In the initial preliminary survey, the researcher asked students to answer questions regarding the conditions of internet access/signal, the electronic learning support devices they had, the social media they used, and the proposed learning method they wanted. Whereas in the final survey, students were asked to give their impressions, suggestions, and criticisms of online learning that had been passed during the odd semester of the 2020/2021 academic year.

Regarding data analysis, the researcher begins by reading the results of the student survey. The results of the preliminary survey serve as a starting point for identifying conditions and suggestions that emerge, which then become the basis for researchers to develop online learning models. While the results of the final survey become material for reflection to determine the effectiveness and efficiency of the online learning model that has been implemented.

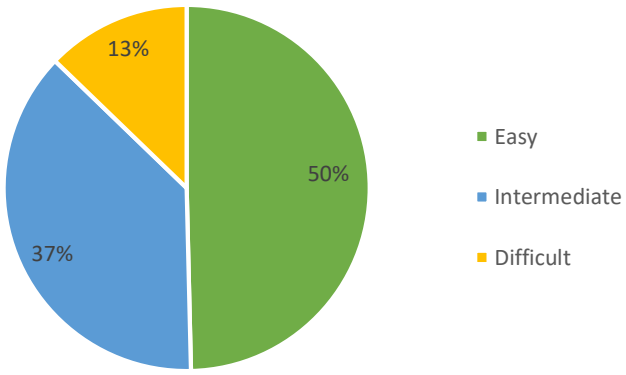
Findings

Systematic Steps for Online Learning Implementation

Learning which is closely related to the use of ICT requires preparation from the planning, implementation to assessment. the stages will be described referring to aspects of online learning. First, the planning stage is related to aspects of online learning design which are manifested in the form of a comprehensive semester learning plan. Semester learning plans in online learning must focus on the paradigm of student-centred learning, student-oriented towards independence, skills, needs, and experiences. The lecturer prepares a learning plan for this semester before the online learning process is implemented.

Second, the implementation stage is related to aspects of activities, strategies, media, and learning technology. Online learning activities must facilitate meaningful interactions between students and lecturers, students and students, and students with their learning materials. Learning materials are arranged systematically and structured according to subject study materials. Strategies, media, and online learning technology are selected according to the tools that are relevant to the student's condition. Here the researcher conducts a preliminary survey of students via a google form, which questions about the conditions of internet access/signal, the learning support electronic devices they have, the social media they use, and the suggestions for the desired learning method. The preliminary survey was completed by approximately 133 students, with closed and open response patterns. The results of the survey answers are as follows:

Graph 1. Student Internet Access/Signal Conditions

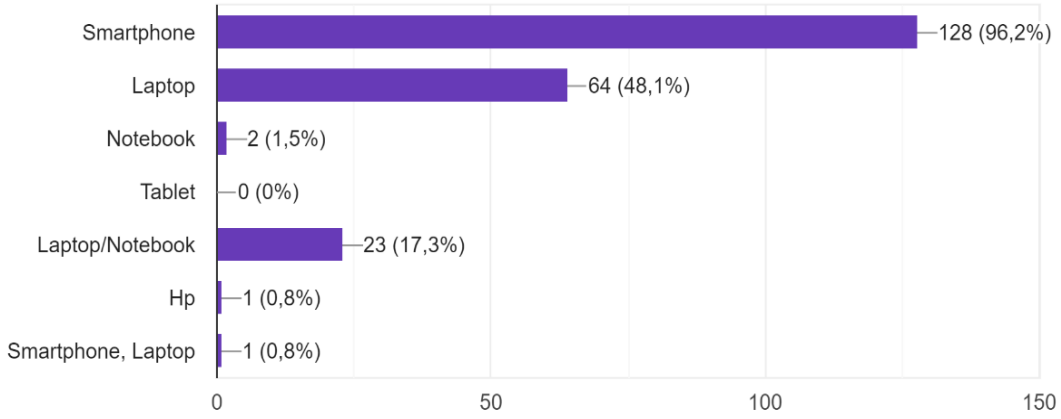


Source: Primary Data (2020)

From graph 1 it can be seen that the conditions of student internet access/signal coverage are 50% easy, 37% intermediate, and 13% difficult. In general, seeing this condition online learning can be implemented because the continuity of online learning cannot be

separated from the existence of the internet as the main infrastructure. What about difficult access? That this difficult condition is related to the location and support of the provider network, usually the students change providers with a stronger network or use public wifi available at the village office and the houses of residents. The next infrastructure is the ownership of electronic devices that support student learning, which can be shown in the following graph 2:

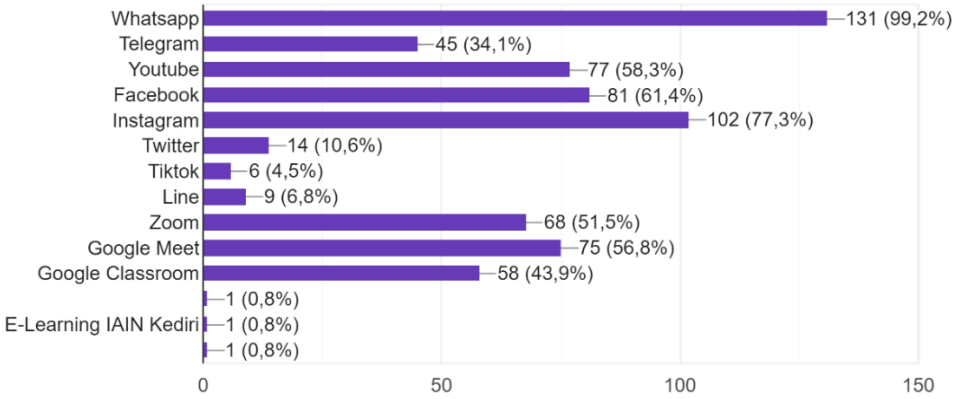
Graph 2. Learning Support Devices Owned by Students



Source: Primary Data (2020)

From graph 2 it can be seen that 96.2% of students already have smartphones as learning support electronic devices, in addition to 48.1% of students owning laptops and other devices such as notebooks, 18.8%. Smartphones have become the devices most owned by the current generation because smartphones have simpler practicality to carry and use anywhere at any time. So the lecturer uses supporting learning media that can be accessed via smartphones and has been widely used by students, as can be seen in the following graph:

Graph 3. Social Media / Chats / Meetings Used



Source: Primary Data (2020)

From graph 3 it can be It is known that the highest percentage of social media used by students is WhatsApp at 99.2%, then Instagram 77.3%, Facebook 61.4%, YouTube 58.3%, Google Meet 56.8%, and zoom 51.5%. Other media such as google classroom, Twitter, TikTok, and line are also used by students but with a percentage below 50%. Regarding the proposed online learning method that students want is also conveyed in an open survey answer, some of which suggest: 1) use methods that are easily accessible, interesting, varied, and affordable, 2) provide text-based and audiovisual learning materials, 3) explain the theory and train skills, 4) giving tasks that are not burdensome and giving feedback on the assignments given, and 5) holding virtual meetings in several meetings.

Based on the results of the data in graph 3 and the answer to the proposed method from the student, the lecturer determines the choice of media used to support online learning which is classified in the following media services:

Table 1. Online Learning Media Services Learning

Platform	Media Type	Description	URL
Web and blog services	e-learning IAIN Kediri	The web-based platform that can be accessed directly via the browser or the Moodle application by entering the enrollment key set by the lecturer, is used as the main learning portal that must be accessed by students to make attendance and access all lecture information connected to other media	http://elearning.iainkediri.ac.id/
	WordPress	Lecturer personal blog/journal machines that are used to provide text-based learning materials that are archived according to course categories and can be connected with other media	(http://intanuzulis.home.blog/)
Social networking service	WhatsApp	A cross-platform messaging application that is used to exchange messages/course information via chat	WhatsApp groups according to the class of each subject

	Instagram	The social networking application, which is widely used by millennials, is used to display photo and video-based student assignments more aesthetically by applying filters. Photo and video posts can be given captions and comments, which are uploaded to the feed or IGTV by marking the Instagram of the course.	• https://www.instagram.com/edupreneurship.iainkediri/ • https://www.instagram.com/filsafatumum.iainkediri/ • https://www.instagram.com/filsafatpendidikan.iainkediri/ https://www.instagra.com/eventmpi.iainked/
Media sharing service	Youtube	Video sharing and watching websites are used to provide video-based lecture materials arranged in playlists according to courses	https://www.youtube.com/results?search_query=intan+nuzulisnaini
Video Conference Services	Zoom	A video communication service developed by a technology company in the United States is used for virtual meetings or conferences that can be recorded and connected to YouTube streaming	https://zoom.us/
	Google Meet	The video communication service developed by Google with limited features is used as a second alternative after zooming in on the needs of virtual meetings or conferences	https://meet.google.com/

Media services as shown in table 1 above show that each media has its characteristics so that lecturers can use it according to their needs, situations, and circumstances in an integrated.

The third stage, assessment in online learning is indirectly related to aspects of learning assistance services. This assessment stage can be done in a formative or summative assessment, which assesses all dimensions of student attitudes, knowledge, and skills. Formative assessment is carried out during the learning process through the process of observation, journal notes, and assignments. This assessment is intended to determine student mastery of the material being studied and is also used as a basis for improving the learning process. Here students can consult, then the lecturer provides directions and advice. Meanwhile, the summative assessment carried out at the end of the lesson will provide information to students about their learning achievement and success. On the other hand, students also provide an assessment of the lecturer through

the final course survey (see Graph 4 in the discussion chapter).

Combination Format for Synchronous and Asynchronous Models

Referring to the results of the preliminary survey described in the previous findings, then how can the forms of online learning models in synchronous and asynchronous learning settings be combined according to the competencies to be achieved? In this context, researchers follow Chaeruman's (2013) recommendation which uses the concept of 4 quadrant learning settings in Figure 3, classification of learning strategies, and learning process standards in the context of an e-learning environment. The results of setting and learning activities in online learning by researchers at IAIN Kediri for 1 semester can be shown in the following illustration table 2:

Table 2. Setting Learning Activities in the Context of Online Learning

Model	Category	Activities	Media
Synchronous	Live Synchronous	Not done because it is fully online	----
	Virtual Synchronous	Conducted via video-conference, audio-conference, and chat / text-based conference in realtime	Zoom. Google meet, Whatsapp
Asynchronous	Collaborative Asynchronous	Conducted through online discussion forums, question and answer, and online assignments (project work)	E-learning, Whatsapp, Google form
	Self-Paced Asynchronous	Conducted through doing assignments, searching material, studying material/learning objects in various formats (text, graphics, audio, video, etc.)	Google, Blog, Youtube: Instagram

Source: Adapted from Khan (2005) and Staley (2007) in Chaeruman (2013) by Intan NN Puspitasari (2021)

From table 2 above, it can be interpreted that synchronous model learning is a learning process that occurs simultaneously at the same time between students and lecturers, although not necessarily in the same place (Littlejohn & Pegler, 2007). Khan (2005) categorizes synchronous models into 2 types, namely live synchronous (face to face) and virtual asynchronous (face to face). Meanwhile, asynchronous learning is a learning process that allows students to experience the same teaching material at different times and places (Smaldino et al., 2008). Staley (2007) divides the asynchronous model into 2 categories, namely collaborative

asynchronous and independent asynchronous.

Furthermore, Smaldino explains what learning strategies/methods are suitable for combining synchronous and asynchronous models, which can be illustrated in table 3 below:

Table 3: Learning Strategies/Methods in the Context of Online Learning

No	Learning Strategy	Implementation
1	Presentation	• The lecturer gives a general explanation • Students present a presentation of their assignments
2	Demonstration	• Lecturer demonstrates learning materials/materials • Students observe, try and apply
3	Drill & Practice	• The lecturer repeats the explanation • Students review and practice
4	Tutorial	• Lecturers provide special guidance on certain materials • Students pay attention and imitate
5	Discussion	• The lecturer presents the topic of discussion • Students are actively involved and question and answer
6	Game & Simulation	• Lecturers make interesting games • Students demonstrate actively and interactively
7	Assignment	• Lecturers give assignments independently or in groups based on problem-solving • Students do assignments well and responsibly

Source: adapted from Smaldino et. al (2008) in Chaeruman (2013) by Intan NN Puspitasari (2021)

Table 3 above shows the application of learning strategies that are more student-centred, meaning that students are positioned as active and independent subjects as adult learners who can be responsible for their learning. Meanwhile, lecturers position themselves as facilitators of learning, including as learning partners, which are no longer the main source of knowledge (Harsono, 2008).

This strategy also leads to active learning which provides opportunities for students to actively interact with lecturers, with fellow students and be able to develop knowledge, not just passively receiving information and instructions from lecturers.

Furthermore, referring to the illustration of table 2 and table 3, synchronous and asynchronous learning settings can be combined with learning strategies/methods, as shown in Table 4 below:

Table 4. Combination of Learning Settings and Learning Strategies/Methods

Strategy/ Method	**Learning Setting**			
	Live synchronous	**Virtual Synchronous**	**Self-Paced Asynchronous**	**Collaborative Asynchronous**
Presentation	---	Presentations via video conference with zoom, google meeting, audio/chat conference with WhatsApp	Learning video presentations on Youtube and IGTV, Learning material on blogs, e-learning	---
Demonstration	---	Demonstration via video conference at Zoom/google meet	Learn the demonstration via video on youtube and IGTV	---
Drill & Practice	---	Drill & practice via video conference at Zoom/google meet, via audio/text with WhatsApp	Drill the material via blog, youtube, IGTV, then review and practice	Personal / group assignments for learning practice
Tutorial	---	Tutorial via video conference at Zoom/google meet	Tutorials via blog, youtube, and Instagram	---
Discussion	---	Discussion via video conference with zoom, google meeting, audio/chat conference with WhatsApp, and e-learning	Questions and answers via comments on youtube, blog, and Instagram	---
Game & Simulation	---	Online games and simulations via google quiz, Kahoot, Mentimeter, jam board	Online or offline games and simulations via PowerPoint, word, hot potatoes	---
Assignment	---	Case studies and questions and answers via video conference via zoom, google meet, via audio/text with WhatsApp	Personal assignments for performance and learning products	Group assignments for learning projects and products

Source: adapted from Chaeruman (2013) by Intan NN Puspitasari (2021)

In table 4 it can be seen as a whole that for 1 semester in the odd semester of the 2020/2021 academic year at IAIN Kediri, researchers (lecturers) carry out online learning with the synchronous and asynchronous combination model. The

synchronous model only occurs in a virtual synchronous, because the delivery of online learning in that semester is continuously included in the fully online category. Fully online means that all learning interactions and delivery of learning materials occur 100% online. For example, a lecturer makes teaching materials in the form of text and then posts them on a blog, uploads them on Google Drive, and then the links are shared and accepted via the internet by students via e-learning and WhatsApp. Lecturers also make learning videos and upload them on Youtube, then upload videos of students' work on IGTV. Meanwhile, asynchronous, learning occurs in both types of asynchronous, namely independent asynchronous and collaborative asynchronous. Although in some types of strategies/methods cannot be done.

Discussion

The implementation of synchronous and synchronous combination models in online learning is known to need to consider the quadrant of learning settings, which refers to learning strategies/methods, using various relevant ICT-based tools and media. The next consideration is to see how the situation and condition both in terms of students, lecturers, and educational institutions at IAIN Kediri.

From the student side, based on the results of survey data on graph 1, graph 2, graph 3, it can be seen that their situation and condition in facing online learning can be said to be ready, because in general students already have easy access to internet access/signals, have electronic learning support devices and has become a user of several relevant social media/platforms to be used in online learning. The students are also actively involved in determining the online learning model which they think is proportional to be applied.

From the lecturer side, it can be seen as the data in table 1, table 2, table 3, and table 4 which shows the readiness of lecturers in preparing for online learning. Where it can be seen how the lecturers' efforts in designing, implementing, and evaluating with the synchronous and asynchronous combination format are to meet the standards of the learning process in stages. The standard stages of the learning process include (Chaeruman, 2019) : 1) the learning stage, 2) the deepening stage, 3) the applying stage, and 4) the measuring stage.

The relationship between the learning stages, strategies/methods, and learning settings with the standard of the learning process in the context of online learning can be described as follows:

Table 5. The relationship between learning strategies/methods, learning settings, and the standard stages of the learning process

Stages	Learning strategies and settings
Learning	• Lecturers carry out presentation and demonstration strategies, which students can study in a synchronous or asynchronous virtual independent learning setting

	• Lecturers digitally package teaching materials in various types and formats of media (text, audio, video) provided through platforms that can be accessed by students and studied anytime, anywhere. Like WhatsApp, blog, youtube, google drive, IGTV
Deepening	• Lecturers carry out demonstration strategies, drills, practice, and tutorials, then students can learn in a virtual synchronous, independent asynchronous, and collaborative asynchronous learning setting. • Lecturers demonstrate the direct practice of certain materials that require in-depth online explanations which are packaged in various types, formats, and media platforms such as the learning stage
Applying	• Lecturers carry out discussion strategies, games, and simulations that include question and answer activities, critical thinking, problem-solving, and collaborative learning, which can be applied by students in synchronous virtual learning settings, independent asynchronous and collaborative asynchronous learning. • Lecturers apply discussion strategies, games, and simulations through media/platforms such as WhatsApp, e-learning, YouTube, IGTV, jam board, PowerPoint, word, hot potatoes
Measuring	• Lecturers evaluate the process and student learning outcomes in a formative and summative assessment, which includes the dimensions of attitudes, knowledge, and skills, which students can do in the synchronous virtual learning setting, independent asynchronous or collaborative asynchronous • Lecturers package the assessment in the form of objective tests, performance tests, observation through quizzes, assignments, project learning, product learning

Source: adapted from Chaeruman (2013) by Intan N.N. Puspitasari (2021)

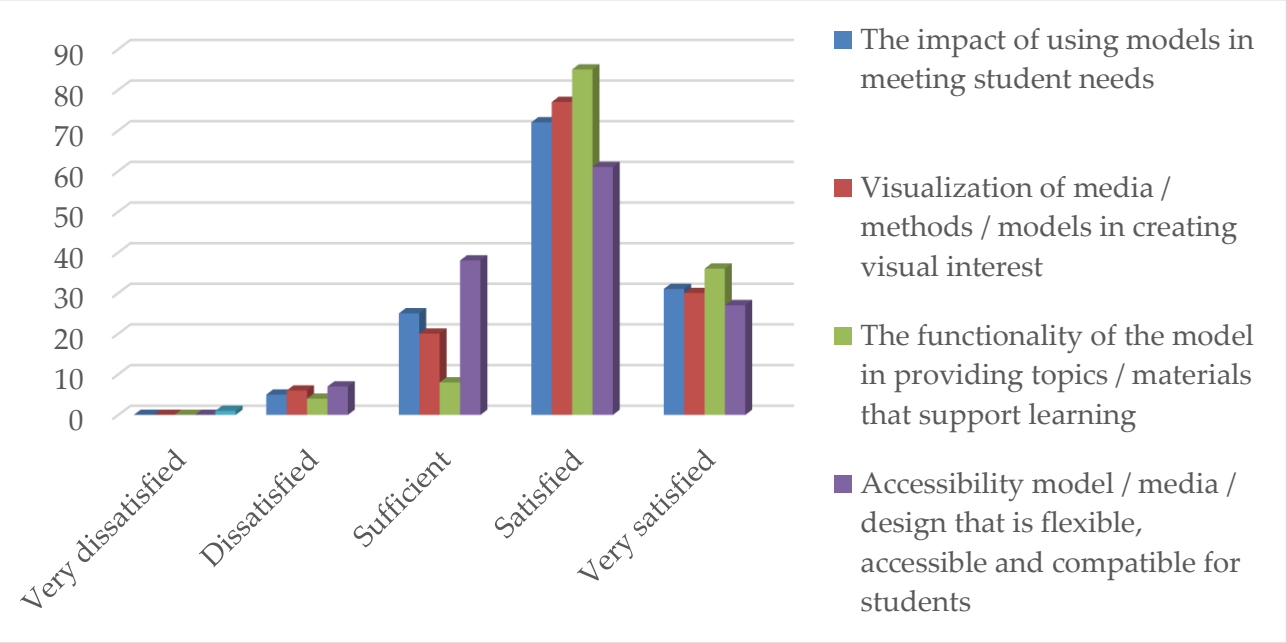
The description of the relationship between strategies/methods, learning settings, and the stages of the learning process in table 5 above shows, although various strategies, methods, and ICT-based media play a key role in online learning, lecturers must still be able to focus their attention on the process and student learning outcomes. not just the technology of delivery. Because in substance, the foundation of the effectiveness of online learning is how to pay attention to student needs, learning content, obstacles faced by lecturers and students (Suyantiningsih, 2003)

So that the use of synchronous and asynchronous combination models is the right choice to optimize online learning with the proportional use of ICT. Important elements that must be considered in the use of ICT are seen from; 1) the impact of its use (can it meet the needs of students?), 2) its visualization (an information packaging create visual and aesthetic interest?), 3) its functionality (can it provide topics/materials that are important in supporting learning), 4) its accessibility (Is the design flexible, accessible and compatible for all students?) (Koohang & Durante, 2003).

These elements then become material for the final reflection in the online learning process for 1 semester using a combination of this synchronous and asynchronous model.

In this reflection, students are given a satisfaction survey with closed questions, as the results can be shown as follows:

Graph 4. Survey of Student Satisfaction Against the Combination of Synchronous and Asynchronous Models in Online Learning Odd Semester 2020/2021 academic year



The survey results showed that in general students were satisfied and very satisfied with the combination of synchronous and asynchronous models in online learning, although there were still some who were quite satisfied or even dissatisfied. These results are of course very useful as a material for reflection and evaluation of learning improvements in the following semesters.

Every strategy, model, and media used in online learning has its strengths and weaknesses. The combination pattern that is applied in online learning here is one of the right formulas to complement each other's weaknesses. Explicitly, the success of any strategy, model, and media depends on the consistent and integrative efforts of various elements.

The role of students and lecturers in the implementation of online learning here has been explained in many previous discussions, then what is the role of the institution in this case IAIN Kediri in supporting the success of online learning? Various supports and efforts that have been made by the institution include providing services, support, facilities, training, recognition, system arrangement as well as the infrastructure needed in the process of implementing online learning, so that online learning can be more optimal, of good quality, and achieve learning outcomes.

The institution also calls on the need for a combination of synchronous and

asynchronous models in online learning, so that lecturers must use campus e-learning, upload evidence of learning activities, and utilize other media that support the optimization of online learning.

Therefore, the findings of this self-study can be a reference for educators and educational institutions who want to design online learning proportionally, with a combination of synchronous and asynchronous models. This combination is needed because the essence of learning is not just knowledge, but also experience and value cultivation, so the main focus of designing online learning is to optimally facilitate meaningful learning experiences by utilizing appropriate learning and ICT strategies.

In practical terms, educators and educational institutions can take the following steps to achieve this goal:

1. Pay attention to the formulation of learning objectives or competencies to be achieved.
2. Determine the appropriate learning strategy according to the learning continuum and refer to the learning objectives or competencies to be achieved.
3. Determine the learning model by referring to the quadrants of learning settings and learning process standards.
4. Use the right information and communication technology, according to the conditions and situations of the learners and educational institutions.

Pour the results into a lesson plan or lecture outline that will be carried out for one semester.

Conclusion

The presence of online learning, which initially became part of distance learning and used as an alternative to conventional learning systems, due to limited space and time. Along with the rapid development of information and communication technology, online learning has become a necessity and unnecessity. Especially when the world faced with the global Covid-19 pandemic, the increase has an impact on the necessity to hold online learning. Instead of online learning as an alternative or the impact of Covid-19, online learning has become a portrait of education today and future.

This study resulted in a finding of a combination of synchronous and asynchronous learning models. First, the stages of implementing complete learning starting from the design process, implementation of the assessment. This implementation stage is pursued by a preliminary survey process and a final reflection of learning to students. Second, the format for the combination of synchronous and asynchronous models in online learning is adjusted and found through the quadrant framework of learning settings, the learning continuum, learning strategies/methods, and learning process standards.

Based on quadrant settings, online learning in this study is carried out on virtual synchronous, self-paced asynchronous, and collaborative asynchronous types. Meanwhile, the continuum of material delivery can enter the fully online stage. There are strategies/methods and student-centred media so that they can trigger student activity, facilitate student learning experiences and achieve learning goals.

The student learning experience optimized through four standard learning processes which include the process; learning, deepening, application, and measuring. All of these things are facilitated by the use of ICT following the conditions and needs of the students of IAIN Kediri. So that the combination of synchronous and asynchronous models in online learning is generally considered to be effective and satisfying, both from the elements of the impact of its use, visualization, functionality, and accessibility.

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