

THE MASTERY OF ELEMENTARY SCHOOL TEACHERS ON THE PRINCIPLES OF EDUCATION IMPLEMENTATION IN THE SOCIETY 5.0 ERA

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Abstract: This study aims to find and describe the mastery of elementary school teachers in Yogyakarta on the principles of implementing education in the Society 5.0 era. To obtain these results, this study used a qualitative approach. Data collection methods are observation, interviews, and literature study. The subjects in this study were elementary school teachers in Yogyakarta with sampling using purposive sampling technique. The results showed that elementary school teachers in Yogyakarta, SD Islam Al Azhar 31 Yogyakarta, SD Kanisius Wirobrajan 1 Yogyakarta, and SDIT Lukman Al Hakim Yogyakarta had mastered the ten principles of implementing education in the Society 5.0 era.

Keywords: Education; Elementary school; Mastered; Society 5.0; Teacher; Yogyakarta

Introduction

The human world faces great challenges in the 21st century caused by the rapid development of technology (Loy, 2020). Several studies show that the presence of technology on the one hand does bring a lot of good for humans. However, on the other hand, technology also has an unexpected impact on human life. Every day new technologies emerge. On the one hand, this type of technology provides convenience in human life, but at the same time its presence also threatens human life (Cathrin, 2019). Whether we realize it or not, the development of this technology has brought a great influence in people's lives. Society is now a digital society, or the type of society that Japan calls Society 5.0 era.

Society 5.0 is a society with a pattern of relationships dominated by technology and *artificial intelligence* (AI). Society 5.0 is a society with a new relationship pattern, namely a relationship pattern defined by the presence of information technology. Information from various sources can be accessed and can be studied by anyone. Learning can now also come from any source (Deguchi et al., 2020). Digital content is an option, an alternative learning media, and even a favorite. Google's video sharing service, YouTube has turned into a new learning place for everyone. This is the reality of human life in the era of Society 5.0. Openness of information with various *platforms* available has become a daily friend of humans. Humans do not have much choice with the presence of this era of Society 5.0. There is only one choice, which is to adapt to the various changes that arise. Human abilities need to be improved or the current language needs to be *upgraded*. One of the efforts to improve human abilities can be done through education (Nastiti & Abdu, 2020).

During the development of the Society 5.0 era, education in Indonesia is also required to adapt to this development. Society 5.0 era education is human-centered education that aims to bring humans back to the central position of life (Miwa, 2020). Unfortunately, not many studies have analyzed readiness in education in the Society 5.0. A teacher is one of the prominent figures determining the educational process's success. Besides, the teacher faces various obstacles in utilizing technology in the learning process. Rigianti's research found that teachers in elementary schools still face several obstacles in the technology-based learning process, namely obstacles to learning applications, internet networks and devices, learning management, assessment, and supervision (Rigianti, 2020). Another study, mastery of technology in the learning process still needs to be improved by prospective teachers (Pangestu et al., 2020). Using technology on the learning process is very important but there are still many problems when implementing it. At a time when society faces the era of Revolution 5.0 the problem of technological

capabilities in teachers must be solved immediately and for those who have mastered must continue to be improved/ developed at all levels of Education (Sudibjo et al., 2019).

This study aims to determine and describe the mastery of elementary school teachers in Yogyakarta on the principles of implementing education in the Society 5.0 era. The teacher was chosen as the target in this study because the teacher is one of the important figures who support the success of the educational process. The basic education level was chosen because this level has an important position in the development of human age. Early childhood development is considered a *golden age* or the golden age of human development so that the educational process at this level cannot be ignored (Devianti et al., 2020).

2. Methods

This research was conducted in three elementary schools in the Special Region of Yogyakarta. The elementary schools are Al Azhar 31 Islamic Elementary School Yogyakarta, Kanisius Wirobrajan 1 Elementary School Yogyakarta, and Lukman Al Hakim SDIT Yogyakarta. The Special Region of Yogyakarta was chosen as the research location with the consideration that this area has been known for a long time as the "Student City". This research is expected to be a benchmark for the readiness of elementary school teachers throughout Indonesia as a basis for policy formulation in the field of education, especially in preparing education in the era of Society 5.0.

This research belongs to the type of qualitative research, is a research method to get the condition of natural objects by placing the researcher as a key instrument (Sugiyono, 2017). In general, this type of evaluative research consists of two main activities. First is a data collection activity; second, is the activity of comparing the results of data collection with the standards that have been used. Based on this measurement, it can then be decided whether primary school teachers in Yogyakarta have mastered the principles of implementing education in the Society 5.0 era or not. The results of this study will be very important as the basis of policy formulation in the field of education. The

The data analysis technique was carried out in three main stages. First, was the description stage or orientation stage. The second stage was the reduction stage, namely the stages carried out by the author to reduce all the information obtained at this stage. Description and then n focuses on a particular problem. The third stage is the selection stage, which is the stage when the researcher has focused on one problem and then analyzes or explores the meaning of the information that has been collected. The results of this study are in the form of meaning for social phenomena in society, which can be used to justify pre-existing theories, or even become new discoveries that replace or complement existing theories (Ministry of National Education, Directorate of Education Personnel, 2008).

Results

Mastery of teachers is very important because mastery of the principles of education in the Society 5.0 era will determine the readiness of teachers and the formulation of strategies in welcoming the education of the Society 5.0 era. This study uses ten principles of implementing education in the Society 5.0 era as indicators to determine the mastery of teachers at SD Islam Al Azhar 31 Yogyakarta, SD Kanisius Wirobrajan 1 Yogyakarta, and SDIT Lukman Al Hakim Yogyakarta. These ten indicators became the subject of questions during data collection, namely in interviewing teachers in the three elementary schools that were the object of research, namely SD Islam Al Azhar 31 Yogyakarta, SD Kanisius Wirobrajan 1 Yogyakarta, and SDIT Lukman Al Hakim Yogyakarta. From each school, 5 teachers were taken as research samples. The results of the research and interviews with teachers and principals in these elementary schools are then presented in the following table.

Table 1 Mastery Level of Teachers on the Principles of Era Society Education 5.0 Implementation

Principles of Implementation	SD Islam Al Azhar 31 Yogyakarta					SD Kanisius Wirobrajan 1					SDIT Lukman Al Hakim 1 Yogyakarta				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Education equips students with the skills to respond and understand text or information accurately.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Education helps or familiarizes students to apply scientific reasoning and new discoveries in everyday life.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education provides provision of skills and abilities to humans in producing knowledge and technology.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education still maintains essential things in education, for example, fostering student motivation to learn, critical thinking, problem solving, and so on.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Student-centered education or Student Centered Learning (SCL).	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education pushes beyond the comfort zone.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education instils the habit of working with clear targets or achievements	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education focuses on providing meaningful and impactful activities	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education receives and provides quality feedback.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Education develops a mental model of an expert or expertise.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Based on the table above, it can be seen that all the principles of education in the Society 5.0 era have been mastered by teachers at SD Islam Al Azhar 31 Yogyakarta, SD Kanisius Wirobrajan 1 Yogyakarta and SD Kanisius Wirobrajan 1 Yogyakarta. The following are data on the mastery level of teachers on the principles of implementing education in the Society 5.0 era.

Discussion

As an educational model that has a 'special mission' to realize individuals who meet the ideals of Society 5.0 above, education in the Society 5.0 era also has several criteria or characteristics. The educational characteristics of the Society 5.0 era are realized through several implementation principles, which serve as guidelines for the implementation of education in this new era. The principles of implementing education in the Society 5.0 era are principles that need to be applied so that the education carried out is able to provide outputs or *outputs* in the form of individuals or *super intelligent* who have digital literacy skills, mastery of technology, *problem solving*, and have high creativity as stated above.

According to Chiaki Miwa, there are five principles in implementing education in the Society 5.0 era. The five principles will be explained as follows. First, the teacher was mastery to equip students with the skills to respond and understand texts or information accurately. Accuracy in understanding text or information is an absolute ability for students to have, considering that in the Society 5.0 era, humans live in the midst of the rapid flow of information as that characterizes society at the previous stage, namely the Society 4.0 era. There are still teachers who have low literacy skills so they cannot facilitate students properly (Subekti, Purnomo, Susilo, Ibrohim, & Suwono, 2018). Nowadays, information sources have grown in such a massive way. Sources of information are

widespread and seem unstoppable in presenting a variety of information. Several sources of information often deliberately spread lies for certain interests (Kristiyono, 2015). The spread of such massive information, if not supported by the ability to manage information accurately, will lead to *hoaxes* and the spread of lies. Society 5.0 is a society that is good at managing information accurately and no longer sharing news carelessly.

The second principle is that education in the Society 5.0 era the teacher was mastery to make students able to help or familiarize students to apply scientific reasoning and new discoveries in everyday life. Scientific reasoning is one of the keys in the progress of science. Getting used to using or applying scientific reasoning means moving towards the advancement of science. Providing evidence-based learning can improve scientific reasoning in students (Erlina, Susantini, Wasis, Wicaksono, & Pandiangan, 2018). The third principle is the teacher was mastery to equip students with skills and abilities in producing knowledge and technology. Education in the Society 5.0 era does not only stop at the knowledge transfer process, but encourages students to produce knowledge products in the form of technology.

The fourth principle is the teacher was mastery to equip students maintain essential things in education, for example, such as growing student motivation to learn, fostering critical thinking, solving problems, and so on. The fifth or last principle, the teacher was mastery to make based education be student-centered or what is called *student-centered learning (SCL)*. SCL is actually not a new method in the world of education, including in Indonesia. However, the application of SCL sometimes still experiences problems, namely in the form of the *mindset* of educators and students. Education in the Society 5.0 era must strengthen the application of this SCL in the teaching and learning process.

The second opinion about the principles of education in the era of Society 5.0 that the implementation of education in the era of Society 5.0 must meet several principles (Setiyani et al., 2020). First, education in the Society 5.0 era the teacher was mastery to push students beyond the comfort zone or get out of the comfort zone. Getting out of the comfort zone is mentioned in various psychological motivations as one of the driving factors for individual progress. This situation also has an impact on the emergence of individual creativity which is one of the main keys to progress in the Society 5.0 era. The nature and attitude of wanting to get out of this comfort zone needs to be familiarized through education.

Second, the teacher was mastery to instill student's habit of working with clear targets or achievements (*works towards well defined specified goals*). Committed to the targets that have been set is one of the keys to achieving productivity. In the era of the development of information technology as it is today, gadgets have become one of human's best friends in all situations. Not infrequently a device such as *mobile phone* in the end becomes a factor inhibiting productivity due to the inability of individuals to commit to the targets that have been set. In order to maintain productivity in the midst of technological developments, it is necessary to set clear targets at work. This needs to be familiarized through education.

Third, the teacher was mastery to make students focus on providing meaningful and *impactful activities*. In the previous description, it has been mentioned that one of the key words in the development of Society 5.0 is the ability to overcome problems or *problem solving*. Abilities *problem solving* can be honed through the ability to understand the meaning of each event experienced. Fourth, the teacher was mastery to equip students receive and provide *feedback*. This is one way to grow *critical thinking* in students which is one of the criteria for getting to Society 5.0. Fifth or lastly, the teacher was mastery to equip students to develop a mental model of an *expertise*. Education is not just a knowledge transfer process, but must be able to instill the mentality of an expert into students.

These are the principles of implementing education in the Society 5.0 era which later became an evaluation medium or indicator to measure the level of readiness of elementary school teachers in facing the Society 5.0 era education through the mastery of elementary school teachers against the principles of the Society 5.0 era. Education is one of the main means of changing individuals and changing society. The idea of Society 5.0 is a new idea that needs to be responded to by efforts to realize the ideals that exist in it through education. The application of the principles in the implementation of education in the era of Society 5.0 is an effort to prepare individuals or students to be ready to become part of Society 5.0 which is ready to deal with technological advances produced through the industrial revolution 4.0.

The world of Education is moving forward to face the covid 19 pandemic condition so as not to have a negative impact on the younger generation who are still in school. The ability to adapt to such situations Spurs the world of Education to think hard so that no generation is lost and different from the previous one. This pandemic has made it impossible to carry out face-to-face education in order to reduce the spread of the Covid 19 virus, and has forced every school to adapt to the distance learning model (Bond, 2021). The preparation of schools to face the covid 19 pandemic situation is to do distance learning. The school equips human resources, infrastructure, students, and parental involvement is an important key in the success of learning. Media that were previously foreign to the community such as google meet, google classroom, Webex, zoom, Microsoft teams became the applications sought by the community, as well as the activation of whatApp group to facilitate the teaching and learning process (Nadeak & Juwita, 2020). This situation is precisely the situation depicted in the education of the Society 5.0 era. The Covid 19 pandemic, in other words, is a driving factor for elementary school teachers in Yogyakarta to be able to master the principles of implementing education in the Society 5.0 era.

Conclusion

The result of this study is that primary school teachers have been prepared to face the era of society 5.0 through teacher mastery of the ten principles of education in the era of society 5.0. Ten things that teachers must consider to prepare students for education in the era of Society 5.0: Equip students with skill to respond and understand information, familiarize students to apply scientific reasoning and new discoveries, provide people with skills and abilities in producing knowledge and technology, maintain essential things in education, education must be student-centered, get out of the comfort zone, working with clear achievements, focus intently on impactful activities, receives and provides quality feedback, and develops a mental model of an expert or expertise.

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References

1. Bond, M. (2021). Schools and emergency remote education during the COVID-19 pandemic: A living rapid systematic review. *Asian Journal of Distance Education*, 15(2), 191–247.
2. Catherine, S. (2019). Technology and the Future of Human Autonomy: A Study of Human Philosophy. *Journal of the Foundation*, Vol. X(No. 1 April 2019), 35–50.
3. Deguchi, A., Hirai, C., Matsuoka, H., Nakano, T., Oshima, K., Tai, M., & Tani, S. (2020). What is society 5.0? In *Society 5.0: A People-centric Super-smart Society*. https://doi.org/10.1007/978-981-15-2989-4_1
4. Devianti, R., Sari, SL, & Bangsawan, I. (2020). Character Education for Early Childhood. *MITRA ASH-SHIBYAN: Journal of Education and Counseling*, 3(02). <https://doi.org/10.46963/mash.v3i02.150>
5. Erlina, N., Susantini, E., Wasis, Wicaksono, I., & Pandiangan, P. (2018). The Effectiveness Of Evidence-Based Reasoning In Inquiry-Based Physics Teaching To Increase Students' Scientific Reasoning. *Journal of Baltic Science Education*, 972-985.
6. Kristiyono, J. (2015). Internet Culture: The Development of Information and Communication Technology in Stemming the Use of Media in Society. *Journal of Scriptura*, 23-30.
7. Loy, J. (2020). *Manufacturing Education for Society 5.0* (pp. 74–97). <https://doi.org/10.4018/978-1-7998-4882-0.003>
8. Ministry of National Education, Directorate of Education Personnel, Di. JPMP and TK (2008). *Approaches, Types, and Methods of Educational Research*.
9. Miwa, C. (2020). Early Childhood Care and Education Practices in Japan for the Era of Society 5.0. *Proceedings of the 1st International Conference on Early Childhood Care Education and Parenting (ICECCEP 2019)*. <https://doi.org/10.2991/assehr.k.201205080>
10. Nadeak, B., & Juwita, CP (2020). Principal leadership in maintaining school governance during the Covid-19 pandemic. *Journal of Counseling and Education*, 8(3), 207. <https://doi.org/10.29210/149400>
11. Nastiti, F., & Abdu, A. (2020). Study: Readiness of Indonesian Education in Facing the Era of Society 5.0. *Edcomtech Journal of the Study of Educational Technology*, 5(1), 61–66. <https://doi.org/10.17977/um039v5i12020p061>
12. Pangestu, K., Luh, N., & Nuraini, S. (2020). Readiness of Prospective Elementary School Teachers in Facing the Industrial Revolution Era. *Elementary School Journal PGSD FIP UNIMED*, 10(2), 40–47.

13. Rigianti, HA (2020). Constraints of Online Learning Process Among Elementary School Teachers in Banjarnegara (The Constraints Of Online Learning Process Among Elementary School Teachers In Banjarnegara). *Elementary School: Journal of Elementary Education and Learning*. <https://doi.org/10.31316/esjurnal.v7i2.768>
14. Setiyani, S., Dasilah, & Nurcahyo, DN (2020). New Paradigm of Disruptive Era Education Towards Society 5.0. *Proceedings of the National Seminar on Postgraduate Program Education at PGRI Palembang University January 10, 2020*.
15. Sudibjo, N., Idawati, L., & Retno Harsanti, H. (2019). Characteristics of Learning in the Era of Industry 4.0 and Society 5.0. *Advances in Social Science, Education and Humanities Research*, 372(ICoET), 276–278. <http://staffnew.uny.ac.id/upload/130682770/penelitian/ba-32kur-masa-depansemnas-untirta16-2->
16. Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, R & D*. Bandung: CV Alfabeta.
17. Subekti, H., Purnomo, AR, Susilo, H., Ibrohim, & Suwono, H. (2018). Analysis of Preservice Science Teacher Information Literacy. *International Conference on Science Education (ICoSEd)*.