



Relationship between nonformal education and Islamic Education in the Context of 2045 Agenda towards Education 4.0 and Society 5.0: Bibliometric Analysis

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ABSTRACT: This study discusses relationship between nonformal education and Islamic education in the context of 2045 agenda towards education 4.0 and society 5.0. The research aimed to relate nonformal education (95 papers) and Islamic Education (990 papers) through the period of 1958- 2022. The VOSviewer application is used to analyse the retrieved bibliographic citation data. The performance of the most productive authors, journals, keywords, and citation references is examined. The rate of relative growth and the time required to double have been calculated. In the years 1958- 2022. The results of the study found how to act so that nonformal education and Islamic Education learning can acclimatize education 4.0 with compacted steps to reach society 5.0. The research novelty showed that there was the addition of new literature about nonformal education and Islamic Education through bibliometric analysis and there was variation.

Keywords

nonformal education; Islamic Education; Education 4.0; Society 5.0

INTRODUCTION

The concept of nonformal education and Islamic education in the context of 2045 agenda towards education 4.0 and society 5.0 has been a prominent feature of educational policy debates (Evgeny G Bryndin et al., 2018). It has brought to light the significance and potential of education, learning, and training that occurs outside of recognized academic institutions (Barbara Aquilani et al., 2020). Planned and systematic education tailored to the needs of students to maximize learning so that it becomes the teacher's attention in the learning process that produces good quality (Alvarez-Cedillo et al., 2019).

Non-formal education has an impact on both life form and national development. Furthermore, it is a basic requirement for democratic republic because nonformal education and Islamic education in the context of 2045 agenda towards education 4.0 and society 5.0 equip students with the necessary knowledge and technology in various activities in modern environment (Hisny Fajrussalam et al., 2020). It also contributes to the preservation of human values that contribute to individual and collective well-being by utilizing the concept of lifelong learning (Elihami et al., 2021).



In terms of democracy, this type of education instils confidence and equips students with the skills necessary to participate in public debates. Furthermore, participation has long been recognized as an essential component in the pursuit of better nonformal education and Islamic education in the context of 2045 agenda towards education 4.0 and society 5.0. Researchers emphasize participation when defining successful education (Deguchi et al., 2020).

Late this year it has been determined that from the term "Education 4.0," conceptualizing it corresponds to the famous four periods of the industrial revolution (Kayano Fukuda, 2020). Consequently, how the evolution of technology has affected the education system over time has been examined. As a result, conceptualization includes learning methods, teaching philosophies, educational models, sources of information, learning methods, and the roles of learners and educators. Currently, methodologies, practices and activities are being developed to personalize the age of knowledge and information transfer processes, making them more efficient, accessible and flexible. (Hasnidar et al, 2019).

The following are the decisive effects of different stakeholders: responsible innovation is also the advancement of a radically new sustainable development model (Sopyan Alif et.al., 2019); technology incubators can significantly reduce social inequalities and inequalities between national economies; responsible innovation is a way out of the maze of misunderstandings about the future of higher education, and tends to put it on the map from the start (Fida Mohammad Mohammadi, 2021).

Despite the fact that Society 4.0 incorporates web technology for data acquisition and analysis, there is still a significant gap between information sharing and related knowledge without ontology studies (Matthew E. Gladden, 2019). Ontology studies are an important part of Society 5.0, in which the massive amount of data, combined with environmental and human biological analysis, grows in tandem with the increasing complexity of the processes required to ensure global sustainability (Carin Holroyd, 2020). Furthermore, real-time decision-making based on big data is becoming increasingly important for improving companies' competitive advantage, and the literature shows that artificial intelligence (AI) can be applied to big data processing. Big data analysis can be beneficial.

METHOD

This study employs a bibliographic study design with systematic and explicit mapping methods. In this investigation, a qualitative case study has been used to approach the research in order to understand how nonformal education and Islamic education fit into the context of the 2045 agenda towards education 4.0 and society 5.0, especially in internal documents. A case study is an object to be studied, not a research methodology option; researchers can use a variety of research techniques to study that object. The instrument is semi-structured interviews to collect data in the study., (Sarif et al., 2017; Syaparuddin et al., 2020; Zengin., et.al., 2021; Suci, 2020).

This study uses a qualitative research approach. Semi-structured interviews are used as a data collection tool. The researcher gathers the participants in a WhatsApp group and gives them some guidelines in the form of instructions. It is critical that you comprehend the data to the extent that you are familiar with the depth and breadth of the interview and that you continue to re-check the initial audio recordings to maintain the authenticity.

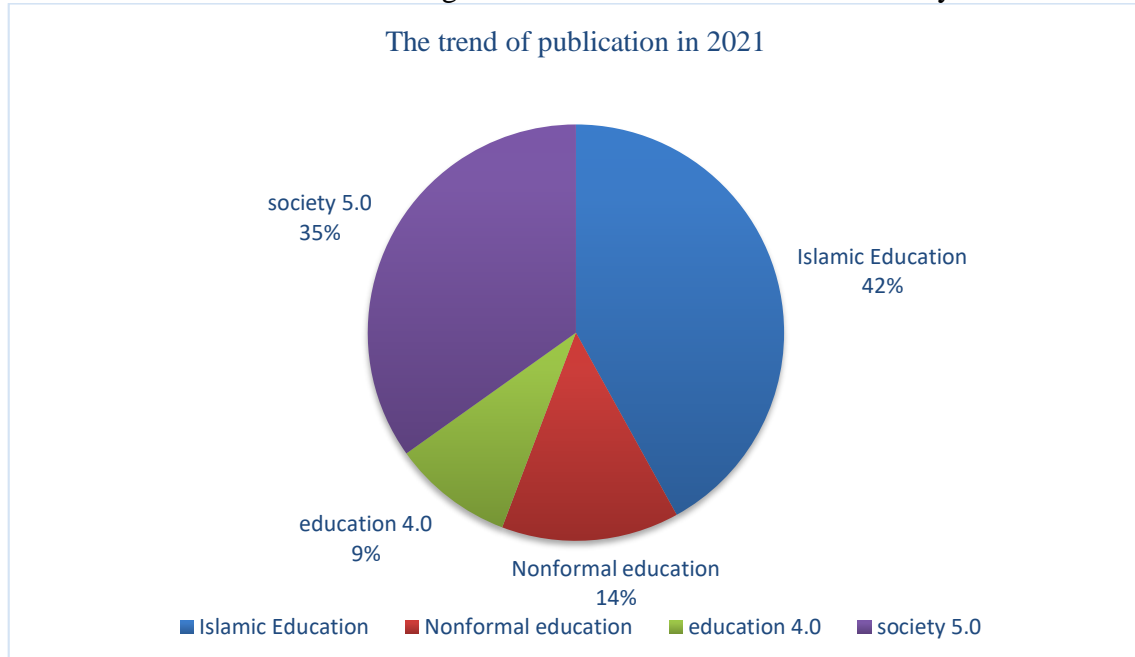


Then, Research method to Relate topics that can help our shape up it. (Amb Dr. Froilan Delute Mobo, 2021). Expression would be time-consuming, frustrating, and progressive; thus, this is the only good way to begin familiarizing yourself with the data. After analyzing the data, the researcher organized it into themes to better understand the pattern. This step reduces some ineffective data in order to highlight the data into theme. All through the data promoter activity and analysis processes, keep an eye out for clusters or classifications of things that go together. At this point, the researcher should refocus on the examination on a broader level of motifs. Instead focus on codes, wider level of themes will deliver sorting of code differences become an effective theme by sorting all data extracts, so that the code becomes important under the scope of non-formal education and Islamic education in the framework of the 2045 agenda towards education 4.0 and society 5.0. And then the effort was realized by combining neuroscience Islamic education with visual educational media that combined modern characters and illustrations with cinematic narratives. The neuroscientific Islamic education movement attempted to avoid the rational approach of classical education, (Z Nuryana, 2020).

RESULTS AND DISCUSSION

Result

The outcomes of the research remains presented by writing the processed data of the trend of publication in 2021 relationship between nonformal education and Islamic education in the context of 2045 agenda towards education 4.0 and society 5.0 as follows.

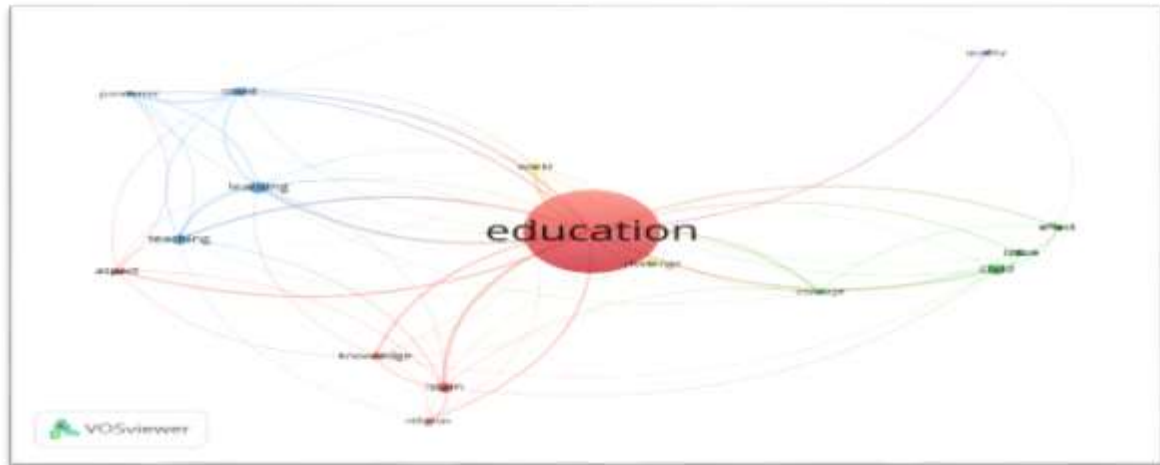


The figure 1. Network Visualization about the trend of publication in 2021 (Islamic Education, Nonformal education, education 4.0 and Society 5.0)

The preliminary search results using the PoP claim resulted of the term “Islamic education”, “nonformal education” “education 4.0” and “society 5.0” appendices, which were sorted into 4 terms designated appendices into publication

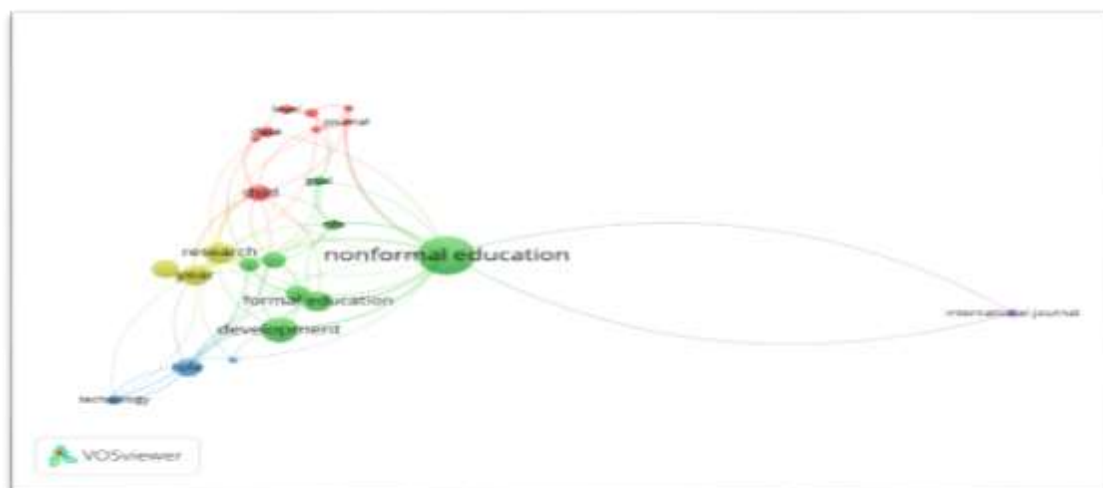
name as journal and Google Scholar database. There were 4 keywords (Islamic education are 312 papers, nonformal education are 197 papers, education 4.0 are 70 papers, and society 5.0 are 260 papers).

Table 1 offerings the total number of bibliographies from each year subsequent from explorations concluded the PoP application.



The figure 2. Network Visualization about Islamic Education

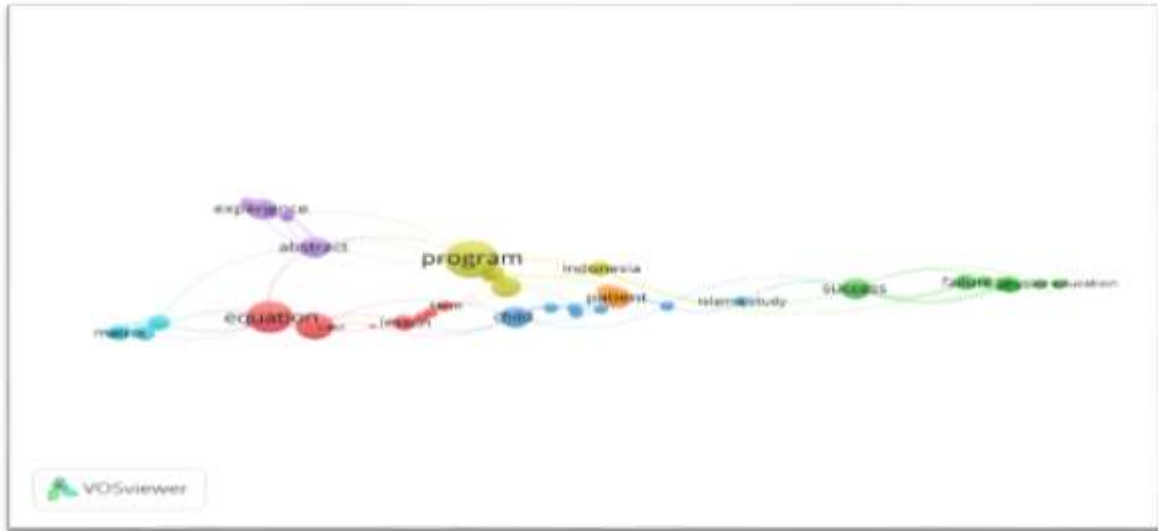
The initial exploration results by means of the PoP application resulted in 312 bibliographies, which were sorted into 35 designated bibliographies. There were 277 bibliographies that were not nominated because they did not meet the established criteria. The figure 2 presents the 17 items of 5 cluster resulting as of searches through the PoP application. The first cluster namely aspects, education, Islam, knowledge, and religion.



The figure 3 Network Visualization about Nonformal education

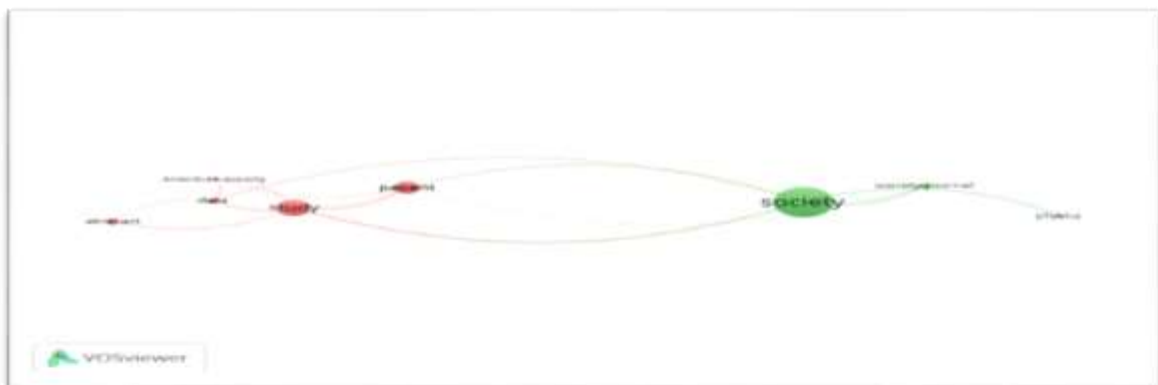


The opening search grades using the PoP tender resulted in 197 appendixes, which were sorted into 26 selected bibliographies. There were 271 bibliographies that were not selected because they did not meet the established criteria. The figure 3 presents the 26 items of 5 cluster resulting from explorations through the PoP application. The first cluster namely child, data, higher education, journal, level, questions, theme, and value.



The figure 4. Network Visualization about Education 4.0

The original search results by the PoP application resulted in 170 bibliographies, which were arranged into 70 selected appendixes. There were 100 appendixes that were not selected because they did not meet the recognized criteria. The figure 4 presents 43 items of 7 cluster resulting from searches through the PoP application. The first cluster namely case, creativity, equation, hand, lesson, number and term.



The figure 5. Network Visualization about Society 5.0

The search results using the PoP application yielded 469 bibliographies, which were sorted into 260 selected bibliographies. There were 209 articles in the

bibliography that were not selected because they did not meet the criteria set by the researcher. Whereas in Figure 5 presents 8 items from 2 clusters of search results through the PoP application. The first cluster is abstract, American society, data, patient and study.

Discussion

1. Learning Method 4.0.

The fundamental elements to form the concept of Education 4.0. As for Competence (training and competency development desired by today's students) (Musdalifah et. al., 2021; Agusriandi et al. 2021; Dewi, 2021), Learning Methods (incorporating new learning methods), Information and Communication Technology (ICT) (current and emerging ICT implementations), and Infrastructure (use of innovative infrastructure to improve teaching-learning processes) (Laksono et al., 2021). During the design of new educational innovation projects, these components can serve as a frame of reference in learning (Minchev et al, 2018; Muh Fihriz, et al, 2018). As a result, new ideas for developing new content, pedagogical procedures, and educational innovation projects may emerge. Therefore, the illustration of the implementation of the relationship between non-formal education and Islamic education in the context of the 2045 agenda towards education 4.0 and society 5.0 is as follows:

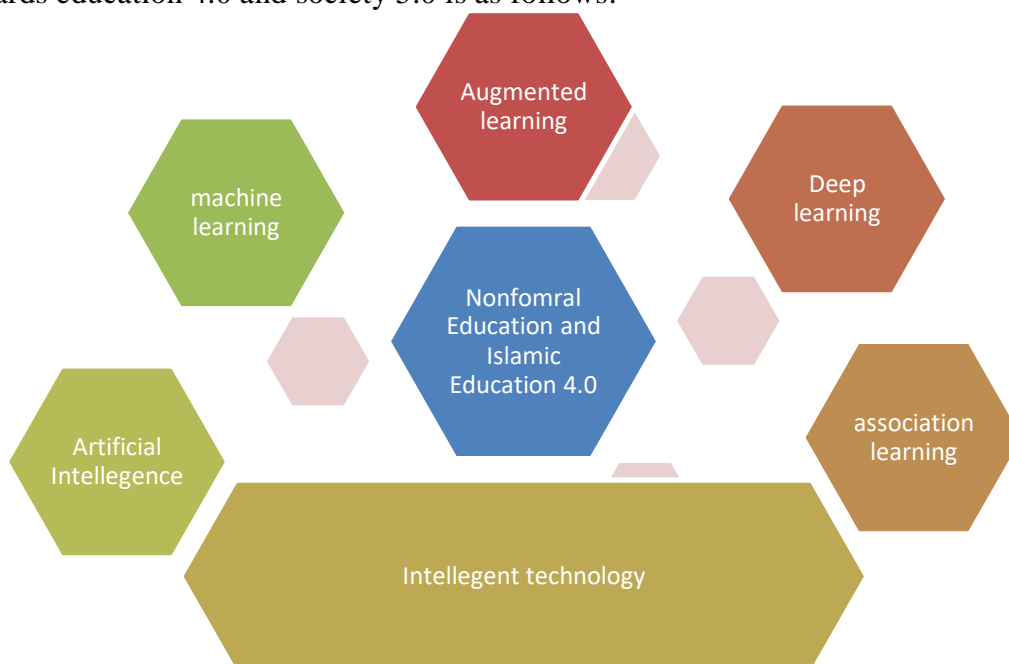


Figure 6. Configurable social management for learning education 4.0

2. Learning Society

The country of Japan has introduced "Society 5.0," which will be the subject of study in data collection, agricultural concepts, industry, and various information information. All of these things are related to the Internet of things (IoT in this new super duper society, and all innovations will be combined which will complexly and significantly improve the quality of life accordingly. The Society 5.0 program ushers in a new era in Japanese history. On a political level, the inauguration of the new Japanese



emperor marks the start of the new year. Japan has disclosed any information of its next imperial era, "Reiwa," which is set to begin on May 1 when Crown Prince Naruhito is expected to ascend to the throne. Yoshihide Suga, Japan's chief cabinet secretary, announced the name at the a press conference following the ceremony the next morning, unveiling a board with the two kanji characters written on it. Whilst also there was some debate over the precise meaning, the two characters that comprise the new name, or the "genko," (Person, 2020; Pinem et al, 2021; Rosa et al., 2020; Rosa et al., 2020; Saputro et al., , 2020).

Community architecture design 5.0 to use to design online communities to build parallel communities featured in a sophisticated manner. The use of design The architectural design of the community 5.0 is modeled as an autonomous agent in an artificial community formed with advanced applications, while customer content is treated according to the needs of the community. Based on this architecture, an artificial population can be added that considers the attribute character, spatial character, and temporal character of the actual population data in photographing the life of the 5.0 era of society (Fandy Nugroho Hardiknasiono Musa, et al., 2021). Furthermore, under certain social situations, the collective behavior patterns of crowds with different population distributions can be investigated. As a result, the architect's design-based artificial community towards the societal challenge 5.0 can be used as a "computing social laboratory" to investigate people's responses to various advertising strategies, social active management, and so on. After that, the strategy or policy with the anticipated response will be implemented in the artificial and physical communities in parallel. It should be noted that responses in physical communities are not always consistent with responses in artificial communities; therefore, the artificial community uses the actual information generated by justice and implements new calculations and decisions to encourage the behavior of the system in justice to merge with the artificial community (Owusu et al., 2011; Abdulrahman et al., 2020; Aini, 2011).

3. 2045 Agenda and Quality Education in Indonesia

In 2045, it is estimated that the world economy will no longer depend on the economic movements of the United States (US). However, it is estimated that the economic canters will move to Asia, such as China, India, South Korea, and Japan. This is because the Asian region is helped by the demographic bonus/dividend. The achievement of the world megatrend in 2045 will be marked by several determining factors including world demographics, global urbanization, international trade, global finance, middle income class, competition for natural resources, climate change, technological progress, changes in geopolitics, and geo-economics changes. Indonesia has the opportunity to enter the 5 countries in the world with the largest economy in 2045.

Agenda to become Indonesia Gold target in 2045, Indonesia's population will reach 309 million people with a Gross Domestic Product (GDP) of 29 thousand US dollars per year. Under these conditions, Indonesia has the opportunity to enjoy a 'demographic bonus', namely the acceleration of economic growth due to changes in the age structure of the population which is marked by a decrease in the dependency ratio of the unemployed population. working age population with the working age population. This structural change allows the creation of a demographic bonus due to the increased supply of labor (labor supply), savings (savings),



and the quality of human resources (human capital). In Indonesia, the dependency ratio has declined and crossed the threshold below 50 percent in 2012 and reached a low of 46.9 percent between 2028 and 2031. Indonesia has the potential to take advantage of the demographic bonus both nationally and regionally. Indonesia's productive age population alone reaches about 38 percent of the total productive age population in ASEAN. The high number and proportion of Indonesia's working age population in addition to increasing the domestic labor force also opens up opportunities to fill the workforce needs for countries where the proportion of the working age population is decreasing, such as Singapore, Korea, Japan and Australia.

CONCLUSION

Quality education is expected in the Industry 4.0 era towards society 5.0. Indonesia is expected to reach its peak of glory in the 2045 target of becoming Indonesia Gold. The main agenda of the Indonesian people and government as the ideals of the Indonesian nation that requires full support by the next generation of teenagers today. Therefore, a mature concept is needed in education 4.0 towards society 5.0. For that, it is necessary to prepare so that the demographic bonus provides benefits. If the productive age is not prepared, it will add to the burden on the state, for example, the fact that currently many young people of productive age are still unemployed, even among undergraduates. Young people are expected to have productive activities towards society 5.0. One of the steps needed is to link non-formal education and Islamic education to spur the quality of life with Islamic character and knowledge in the context of activities outside of school.

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