The role of social sciences in the establishment of social behavior in the Industrial Revolution 4.0

Deliya Paramita *, Sani Safitri
Universitas Sriwijaya.
* Corresponding Author. E-mail: deliyaparamita980@gmail.com

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ABSTRACT

This article aims to provide knowledge about the need to shape social behavior in the face of Industrial Revolution 4.0. One option is to study the social sciences. The interaction between parents, schools, teachers, and the social environment to enable the nation's prospective students to face and survive the Industrial Revolution 4.0 is also less critical. The method used to analyze this problem is a qualitative descriptive method, namely a literature study. This article's literature review involves extensive reference books, journal articles, conference proceedings, and many other scholarly manuscripts. Once collected, the research analysis is carried out according to the article's topic. The results of this study explain that: (1) When forming social behavior in social pedagogy, it can develop through personal, social, and intellectual abilities; (2) The social skills developed are respecting and appreciating each other; and (3) The ability to communicate and cooperate. Prosocial behavior; Ability to care for society in the environment; Strengthening the spirit of nationalism, understanding inequality and equality.

INTRODUCTION

The Industrial Revolution 4.0, characterised by the integration of advanced technologies such as the Internet of Things (IoT), artificial intelligence (AI) and big data, has fundamentally changed the way humans live, work and learn. In this context, education is not only faced with the challenge of adapting new technologies, but also of ensuring that the younger generation has the character and social behaviours that match the demands of the times. Social Studies education plays an important role in shaping this character, as social studies aims to develop social awareness, critical thinking skills, and values that support harmonious social life (Schwab, 2017; Setiawan et al., 2020).

Character education theory emphasises that a person's character is formed through a long and continuous process, influenced by environment, education and life experiences (Lickona, 1991). Character education in the context of social studies integrates moral and social values into the curriculum, with the aim of forming individuals who are not only academically intelligent, but also have strong morality and social responsibility. According to Banks (2008), effective social studies education should be able to teach students to be critical, reflective, and proactive citizens in dealing with social issues.

Previous research shows that character education through social studies can increase student engagement in society and reduce negative behaviours among adolescents (Nursid, 2019; Setiawan et al., 2020). For example, García and Weiss (2019) found that continuous professional development

support in education can significantly increase teachers' career satisfaction and indirectly increase student engagement in the learning process. Kim and Baylor (2016) also emphasised the importance of pedagogical agents as learning companions who can facilitate the development of students' social and emotional skills. However, despite the abundance of literature supporting the importance of character education, there is still little research that focuses on how social studies can be optimised to shape social behaviours that fit the challenges of the Industrial Revolution 4.0. This research seeks to fill the gap by exploring the role of social studies in shaping adaptive and competitive social behaviour in this era of change.

Based on the above background, this research is focused on several main research questions: (1) How is social studies education currently implemented in the context of the Industrial Revolution 4.0? (2) What are the most important character values to be taught through social studies in this era? (3) How can these values best be integrated into the social studies curriculum? (4) To what extent can social studies education shape adaptive and competitive social behaviour among students? To what extent can social studies education shape adaptive and competitive social behaviour among students?

The main objective of this research is to evaluate and provide recommendations on how social studies education can be optimised to support the formation of social behaviours that are in line with the demands of the Industrial Revolution 4.0. Specifically, this research aims to: (1) Analyse the implementation of social studies education in the context of the Industrial Revolution 4.0; (2) Identify the most relevant character values to be taught through social studies in this era; (3) Develop strategies for the integration of character values into the social studies curriculum; and (4) Assess the impact of social studies education on the formation of students' social behaviour.

The benefits of this research can be felt by various stakeholders, including educators, policy makers and educational researchers. For educators, the results of this study can be used as a guide to develop a curriculum that is more relevant to the needs of the times. For policy makers, this research provides a basis for developing educational policies that support the development of students' character and social skills. For educational researchers, this research adds insight into the role of social studies in character building in the era of the Industrial Revolution 4.0.

This research is very important to do considering the rapid changes brought by the Industrial Revolution 4.0 which not only affects technology and economy, but also social and culture. These changes demand an education that is able to prepare the younger generation with skills that are not only technical, but also social. Social studies education, with its focus on social and moral values, has great potential to help students develop adaptive and competitive behaviours, which are indispensable for facing global challenges. Without strong character education, young people risk being trapped in negative behaviours that are incompatible with the demands of the times, such as a lack of a sense of social responsibility, intolerance and an inability to collaborate with others (Darling-Hammond et al., 2020; Yoon et al., 2020).

This research is expected to make a significant contribution to the field of education, particularly in developing a social studies curriculum that is more relevant to the era of the Industrial Revolution 4.0. By identifying and integrating important character values, this research aims to shape a younger generation that is not only intelligent and technological, but also has high social awareness and is ready to face future challenges (Howard-Jones & Jay, 2016). In addition, the results of this study are also expected to serve as a basis for the development of a more holistic education policy, which incorporates both academic and character aspects in the national education curriculum (Mertens, 2019; Johnson & Onwuegbuzie, 2004).

METHOD

This research used descriptive qualitative method with literature study approach. This method was chosen because it allows researchers to conduct in-depth analyses of various written sources relevant to the research topic, namely the analysis of character education content in social studies textbooks Curriculum 2013. Literature study involves collecting data from various sources such as reference books, journal articles, conference proceedings, and other academic manuscripts relevant to the topic of this research (Creswell, 2017; Moleong, 2018).

The data collection process began with the selection of literature directly related to character education, the 2013 curriculum, and social studies textbooks. After the literature was collected, the researcher conducted a narrative content analysis to identify and categorise the character values contained in the social studies textbooks (Eriyanto, 2015). This content analysis was conducted by systematically reviewing the text and identifying implicit and explicit messages related to character education.

Furthermore, the researcher also considers the views of experts in the reviewed literature to strengthen the analysis and the resulting findings. The data obtained from the literature study were then processed and interpreted in accordance with the theoretical framework used in this research, namely the theory of character education and the national curriculum framework (Sugiyono, 2018).

This descriptive qualitative method through literature study allows researchers to understand and describe complex phenomena related to the integration of character education in the curriculum. In addition, this approach also provides deeper insights into how character values can be effectively implemented in social studies learning, especially in the context of facing the challenges of the Industrial Revolution 4.0 (Fraenkel & Wallen, 2009)..

RESULT AND DISCUSSION

Life During the Industrial Revolution 4.0

We can not stop the progress of time. This is also in line with human development and thought. With the rapid development of the times and technology, without us realizing it, we are already in the industrial era, which is also known as phase 4.0. Industry 4.0 is being hotly debated by many people. The author of this article attempts to describe and explain all the questions that have been asked. As said (Schwab 2017) in his book The Fourth Industrial Revolution, from 1760, there was a very rapid change in the industrial sector, namely the invention of the train and the invention of the steam engine, after the end of the 19th century. There was the invention of electricity, which marked the industrial revolution. Then in 1960, the invention of computers became the hallmark of the third revolution; then, in the 21st century, it was known as the Industrial Revolution 4.0, which was marked by mobile and the Internet. The advent of the invention of the Internet changed everything. The Internet changes every aspect of life, and its existence continues to bring changes in various areas of life. It starts from economic life, technology, the world of politics, socio-culture, and also the field of education. A well-known example is the growth of e-commerce, the growth of shopping applications that can be accessed directly via smartphones so that people no longer shop directly at stores, and this has led to changes in people's buying culture which is increasingly being consumed because of the ease of purchase and access. Second, the Internet quickly penetrates all existing boundaries and barriers thanks to Internet and computerization. Boundaries such as space, distance, and time are no longer limited. All have been facilitated by the Internet and supported by increasingly convenient and compact mobile devices.

Industrial revolution 4.0 has also changed the patterns and customs in the education world. Education in the industrial era 4.0 is converting conventional learning models to internet-based ones, or what we often hear with online learning models. Students can study independently using applications that support students in learning. In addition, the division of tasks has also begun to move to a similar system. However, did not realize that the new model at that time would trigger problems. The first problem is, of course, the uneven access from one field to another. The second possibility, students and, of course, teachers, who are generally afraid to use and learn new technology, have experience stuttering about technology.

The history of globalization proves that every era of change has its core (engine). Friedman Ritzer and Toffler's description shows that the movement of change is always triggered by technological developments that lead to the era of the industrial revolution 4.0, which includes not only extensive interactions but also disrupts various fields of human life. Capital disruption is a phenomenon that occurs in the financial world, especially in the corporate sector. Clayton (Christensen 1997), a business professor at Harvard, calls it the distraction of innovation in the Innovators' Dilemma (Christensen 1997). Disruption is a condition where a company must continue

to innovate following developments so that it can meet not only current needs but also anticipate future needs.

The traditional way of thinking in Indonesia emphasizes that agricultural products serve the basic needs of life (basic needs). At the same time, profits based on economic milestones are hindered for the market and cannot be maintained. Indonesian agricultural products such as cocoa, coffee, tea, and even cassava are processed by the latest breakthroughs in thinking and technology to create sophisticated products that make Indonesia a consumer. This fact will always place Indonesia as a country that is no longer market-determined but still market-determined. Another factor that must be considered in teaching social studies is that due to globalization, the future life of the nation can no longer be fully determined by the Indonesian people. Global and regional economic, political, scientific, technological, and even cultural, arts and education life will be more influential than ever.

Globalization has changed the color of citizens' activities as a system that places international and national interests alongside local interests (provincial/state level and residents around schools). Technological advances have had a global impact on homes and private spaces that have never been touched. The life of Indonesia's young generation in 2030 will face the threat of a larger free market and as a verification of their presence to become the Golden Generation of Indonesia. When Indonesia commemorates its 100th anniversary of independence, the life of the Indonesian nation has been greatly influenced by the success of the young generation listed as the Golden Generation.

Social Behavior in Social Studies Education During the Industrial Revolution 4.0

The amount of skills that must be possessed by every Indonesian citizen, including students during the industrial revolution, has an impact on global education to be able to prepare students to be able to participate in a global nation. Maitri Group argues that there are four primary skills in this era of globalization which include digital age literacy, intellectual capital inventive thinking, interactive communication of social skills, quality, and current outputs (Ginanjar, 2016). With so many skills that must be mastered, schools are asked to update the way of learning so that students can master several skills that are expected in people's lives during the industrial revolution 4.0. In is the social studies learning method, where social studies have a crucial role in building social conduits by improving students' social skills and abilities. Skills in Social Studies Education

Social studies subjects mean subjects that aim to guide students as good citizens of the country, namely citizens of a country that can live as a democratic, friendly, and positively correlated society with society, regarding the use of social studies objectives based on the National Council of the Social Studies (NCSS) namely, help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world" (NCSS, 1994). This is also reinforced in Permendiknas No. 22 of 2006 concerning Standards for Social Studies Subject Content, namely: (a) understanding the design related to using community activities and their environment; (b) having basic skills for logical & critical thinking, curiosity, inquiry, coping, skills in social life; (c) have commitment, enlightenment about social and human values; and (d) have the skills to inform, relate, and fight with various citizens at the regional level (Ginanjar, 2016).

From the description above, it is necessary to determine the number of competencies that can be improved through IPS. James Bank revealed that the skills students must master through social studies are knowledge of the state community's skills, behavior, values , and practices. Students must master the knowledge of decision-making to interact positively and effectively in society. Students must master academic and social skills. As a result, students are competent in cognitive aspects and intelligent in affective aspects (values). Students need to develop committed behavior that upholds populist values and humanism. As a result, they can become people who have commensurate values using state ideology. Students are supported to take part in the life of the people of their country in improving the social skills of students in social studies learning. Multiple social skills involve an emotional point of view, and impressions are the affective domain. Regarding groups, all will never be dated based on the values that function in society. Social skills and values are two that cannot be

broken down into social relations in society. As such, it is essential to study social studies based on values in order to develop students' social skills.

Ability in Social Studies Education

Wayan Lasmawan revealed that there are three competencies in social studies learning, namely individual competence, social ability, and intellectual ability. Individual abilities are essential competencies related to using the formation and development of students' personalities to become better and responsible individuals. The primary goal of training and developing personal skills is emphasized in the effort to socialize the enlightenment development of students to be exclusive using all their dynamic personal strengths, characteristics, and unity (Wayan, 2009). Some individual abilities in social studies learning must be developed, such as the formation of self-concept and understanding, objective behavior towards oneself, self-actualization, self-creativity, independence itself, including how to develop noble character, discipline, trustworthiness, hard work, and become God's creations. YME, as a result, needs to develop and strengthen its faith and piety (A.M, 2010).

Social skills are essential skills related to developing enlightenment into social beings. Some essential abilities are improved, namely enlightenment of identity to become people's representatives as a result of having mutual respect and appreciation, understanding and enlightenment on natural politeness in society and the nation; the ability to communicate and cooperate with each other; prosocial behavior; ability and social awareness in the environment; strengthen the spirit of nationalism, understanding of equal disparities. One of the pillars of learning that has strength is value-based. This milestone also applies to developing students' social skills in social studies learning (Ginanjar, 2016). In interacting with the people, everything will never be separated according to the values that apply to society. Social skills and values are two things that cannot be separated in social relations in society. Thus, it is essential to learn social studies based on values in order to develop students' social behavior.

Intellectual ability is intelligence based on enlightenment or belief in something good that is physical, social, and psychological, which benefits himself and others. This essential intellectual ability is related to using the development of the identity of students as a society to think whose thinking power is to acquire and process and create knowledge, values and attitudes, and actions in individual and social life.

A number of explanations can be described to build social conduits and social responsibility in students through social studies subjects, it is necessary to develop personal abilities, social abilities and intellectual abilities, because using individual abilities the primary goals of forming and developing students are more emphasized in an effort to self-socialization and the development of personal enlightenment students become directly using all of their strengths, features and totality that function, and social abilities, some basic abilities can be improved in the personality of students, meaning that their enlightenment becomes a member of the community as a result even though they look at each other and respect each other; openness, awareness and enlightenment based on social and national politeness; the ability to communicate and cooperate with each other; prosocial behavior; ability and social care in the environment; strengthen the spirit of nationalism, understanding of disparity and equality, and intellectual competence of basic abilities developed in intellectual competence using the personal development of students to become thinking beings whose thinking power is to acquire and process and shape knowledge, values and behavior, and their actions both in personal life as well as social.

CONCLUSION

Transformation in the educational environment was inevitably affected by industrial revolution 4.0. For this reason, it is necessary to form social behavior in teaching social studies subjects. Social studies teaching can answer the challenges of the times and needs to be transformative to benefit students' lives before the industrial revolution 4.0. Therefore, forming social behavior in social studies learning must be improved through personality abilities, social abilities, and intellectual abilities.

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