Nationalism and integrity values in teaching-learning process of mathematics at elementary school of Japan

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Abstract. The values of Nationalism and Integrity are very important to be grown in the young generation. Japan has succeeded in strengthening those values through education in schools. Therefore, it is necessary to do collaborative research between the Research Team of Universitas Negeri Semarang (UNNES) with the partner lecturer from Hiroshima University, that is Prof. Takuya Baba, Ph.D. The problem: How to integrate the values of Nationalism and Integrity in mathematics teaching-learning process at Miyauchi Elementary School of Hiroshima? The research method uses a qualitative approach with the research subjects of Miyauchi Elementary School teachers were selected. The main activity in Japan: observation, interviews, and Focus Group Discussion (FGD) in Miyauchi Elementary School, guided by the partner lecturer. The results of this research: (1) Nationalism and Integrity values has been instilled through families traditionally. (2) Schools apply Nationalism and Integrity values in real context through the learning process, including in the mathematics learning. (3) Courtesy and discipline were also planted in the classroom and has been entrenched among teacher-students. (4) When the student answers the teacher's question, the students immediately stand up and salute by bowing, then respond.

1. Introduction
Schools in Indonesia are currently implementing government programs to cultivate students' character values. There are five main values of the character developed namely: religious, nationalism, autonomy/independent, mutual cooperation, and integrity. Currently schools in Indonesia are starting to implement Strengthening Character Education (PPK). This article, written based on the international collaborative research. Our research team has gone to Hiroshima University with a partner lecturer is Prof. Takuya Baba, Ph.D. Guided by him then the research team conducted next research at Miyauchi Elementary School of Hiroshima. The study was designed to be implemented for 2 years. Research in the first year focused on the value of nationalism and integrity. This first year of study would like to reveal how the elementary school teachers in Japan integrate the nationalism and integrity values in mathematics learning.

Nationalism is a character value of the way of thinking, behaving, and doing that shows loyalty, caring, and respect which places the interests of the nation and the state above the interests of the self and the group. While Integrity is a character value of the attitude of responsibility as a citizen, actively involved in social life, through the consistency of actions and words based on the truth.

Nationalism and Integrity are very important. Nationalism building and Integrity must be strengthened again in the young generation in Indonesia. And, Japan is a country that teach Nationalism and Integrity values in school specifically in the mathematics learning process from an
early age. Agboola and Tsai (2015), Pattaro (2016), and Tse and Zhang (2017) wrote that character values need to be given to students through school education since early.

Japan is known as a country that has discipline, responsibility, take care of their culture (has integrity), and a great sense of nationalism. Writings on mathematics that are inserted by cultural values are also widely written by experts in Mathematics Education in Japan.

The problem of this research is as follows. How to integrate the values of Nationalism and Integrity in mathematics teaching-learning process at Miyauchi Elementary School of Hiroshima?

The objective of this research was as follows. (1) To reveal how the teacher at Elementary School of Japan integrates the value of Nationalism in mathematics teaching-learning process. (2) To reveal how the teacher at Elementary School of Japan integrates the value of Integrity in mathematics teaching-learning process.

Character education is an effort undertaken by the state (Government), society, family, and educational units to make Indonesian people as a nation of noble character. A good character is a righteous living behavior that fits the living philosophy of the Indonesian nation, namely Pancasila. The noble character is Indonesian human behavior in human relationships with God, fellow human beings, the nature of the environment, nation and country, and with themselves.

Almerico (2014) and Chou et al (2014) stated that character is characteristic of a person or group of people referring to a series of attitudes, behaviors, motivations, and skills as a manifestation of values, abilities, moral capacities and persistence in the face of adversity and challenges. Shu (2016), Nishimura et al (2016), and Budhiman (2017) said that characters contain distinctly good values, that is to say the value of goodness, to do good, to have a good life, and to have a good impact on the environment that is self-contained and manifested in behavior. The character is also an individual's ability to overcome his physical limitations and his ability to dedicate his life to good values that benefit both yourself and others. Thus, a good and strong character shapes the individual to be a change-maker for himself and the surrounding community.

There are five main values that are grown in Indonesia through formal education in schools. The five main values of the nation's character are: (1) religious, (2) nationalism, (3) integrity, (4) independently, and (5) mutual cooperation. The first year of the research that underlies this article, are the values of nationalism and integrity in elementary schools in Japan that are integrated through mathematics learning.

Growing a nationalist soul to students at an early age is a very important act. The value of a nationalist character is a characteristic value that shows how to think, how to behave, and act that shows loyalty, awareness and high appreciation of the national language, the physical, social, cultural, economic and political environments of the nation, places the interests of the nation and state above self-interest and group. The nationalist value of students can be observed through the attitude of students in appreciating the culture of the nation itself, willing to preserve the nation's cultural richness, willing to sacrifice for the state, willing to achieve excellence, and achievement, love the homeland, ready to keep the environment, obey the law, have discipline, respect for cultural diversity, ethnicity, and religion.

The value of the integrity character needs to be given to the students. The value of integrity is the value that underlies the student's behavior based on making himself or herself trustworthy in words, actions, and work, committed and faithful to humanitarian and moral values (moral integrity). The character of integrity includes the attitude of responsibility as a citizen, actively involved in social life, through the consistency of actions and words based on truth. The value of integrity in students can be observed through the attitude of students who uphold honesty, love for the truth, faithfulness, moral commitment, anti-corruption, justice, responsibility, exemplary, and respect for the dignity of the individual including persons with disabilities.

The integration of character education in particular the value of nationalism and integrity in the process of learning mathematics, among them can be done through: (1) Integrate it in the mathematics learning process in the classroom through the content of the curriculum in the subjects, and integrated in the subjects. (2) Strengthen classroom management, choice of methods and evaluation of learning. (3) Developing local content in accordance with regional needs. (4) Emphasize the habituation of the main values in everyday life in school. (5) Comply with all school norms, rules and traditions.
International Research Collaboration and Scientific Publication in 2018 has been preceded by similar research. The first research was International Research Collaboration between Mathematics Education Study Program of Kebangsaan Malaysia University with Mathematics Education Study Program of FMIPA of Universitas Negeri Semarang in 2016. In this study, the theme studied was Mathematics Learning in Elementary School based on local culture.

Furthermore, in the year 2017 also has done International Research Collaboration between Mathematics Education Studies Program of Kebangsaan Malaysia University with Mathematics Education Studies Program of FMIPA of Universitas Negeri Semarang with a different theme, namely Mathematics Learning in Junior High Schools based on coastal culture.

Based on the results and experience of the two International Research Collaboration mentioned above, it was expected that the International Research Collaboration with Hiroshima University that studying of: Integration of Nationalism and Integrity Values in Teaching-Learning Process of Mathematics at Elementary School, is getting optimal and useful results.

2. Methods
2.1. Research Approach
To support the contents of this article, the research team has conducted overseas cooperation research in Japan with Prof. Takuya Baba, Ph.D. as a Partner Lecturer. The partner lecturer is the dean of IDEC of Hiroshima University. This research with qualitative approach.

2.2. Subject and Location
The research subject of this research: Teachers and students of Miyauchi Elementary Schools at Hiroshima. Location of research at Miyauchi Elementary Schools at Hiroshima and IDEC of Hiroshima University.

2.3. Data Analysis and Interpretation
Analysis of the data in this study using the rules of Matthew B. Miles and A. Michael Huberman. Miles and Huberman (2014) stated that activity in the qualitative data analysis performed interactively and lasts through to the end, so that the data are fit for the purpose. Activities of data analysis include: data reduction, display data, interpretation of data, and conclusion or verification.

2.4. Main Research Activities
In Japan, our main activities were: (1) Observation in the low class of Miyauchi Elementary School, guided by the partner lecturer. (2) Interview with some of student in the low class of Miyauchi Elementary School, guided by teacher and the partner lecturer. (3) Conducting of Focus Group Discussion (FGD) at Miyauchi Elementary School, guided by the partner lecturer. The members of FGD were the partner lecturer, some of teachers of Miyauchi Elementary School, some of International students of IDEC-Hiroshima University, and Research Team of UNNES. (4) Conducting of Focus Group Discussion (FGD) at IDEC-Hiroshima University, guided by the partner lecturer.

3. Results and Discussions
3.1. The Result of Research
Integrated Nationalism and Integrity: The Invention of Character Education in The Low Class
Implementation of class observation, guided by the partner lecturer. Inthisactivity, the team of researcher accompanied by Translator who translate directly from Japanese to English with Earphone equipment. The research team also uses data recording tool, namely Handycam. Nationalism values observed were school efforts in maintaining the nation's cultural wealth, obedience to the rules, and discipline. While the value of Integrity observed was honesty and responsibility value.
Observations on the integration of Nationalism values in the mathematics learning were as follows. (1) Students and teachers arrive on time. (2) The classroom atmosphere was very conducive. (3) When students were asked questions by teachers about mathematics material, before answering, the students stand up first, then the students bend, answer, and bend again, the students sit back in their seats. (4) All students do their work honestly, independently, and responsibly. (5) At the end of the lesson, the students came out in an orderly fashion and did not find students scrambling out of the classroom. (6) Mathematics books for students are used with the full sense of responsibility. (7) In the Lesson Plan created by teachers, there is no explicit character education.

*The Invention of Character Education face to face with Student*

The Research Team was given the opportunity to "play". The game is mathematical by using a number card. Look at the following Figure 2 below:

The invention of the research team were as follows. (1) Students maintain the nation's culture by standing up, then bending to the Research Team, as the research team approaches. (2) Students take polite mathematical play to the Research Team, but discipline with the rules and timely. (3) All students appear to be active and act responsibly.

*The Invention of Character Education Based on FGD Results in Miyauchi Elementary School*

After visiting the class, continued with Focus Group Discussion (FGD) at Miyauchi Elementary School, Hiroshima. FGD participants are Principals, teachers, UNNES Research Team, the partner
lecturer, some graduate students of Hiroshima University. The findings of the research team are as follows. (1) All FGD participants no one arriving late to the FGD room. (2) The course of FGD was orderly, active, and conducive. (3) All FGD participants were active in giving their thoughts on the new advanced, critical, and active mathematics learning process. (4) Values of character that appear in school, had begun their education in the family for generations and respect by way of bowing is a cultural tradition of Japan. (5) Student math book, indeed character education was not listed. (6) In the Lesson Plan created by the teacher, it does not contain explicit character education.

The Invention of Character Education based on FGD Results in Hiroshima University
The second FGD (Focus Group Discussion), was held in IDEC room, Hiroshima University. FGD participants are UNNES Research Team, the partner lecturer, a graduate student of Hiroshima University, both from Local Student and students from several countries namely Indonesia, Cambodia, Laos, Egypt, and Rwanda. Figure 3 below illustrates a very lively and conducive FGD.

Figure 3. FGD participants from Japan are providing inputs related to the integration of values of Nationalism and Integrity character in the process of Mathematics Learning

The results of the second FGD at IDEC Hiroshima University were as follows. (1) Affirming that character education had been given traditionally in Japanese families. (2) To preserve traditional Japanese culture such as bowing, honoring older people, already taught from childhood by Japanese families. (3) The Japanese are very respectful of honesty, courtesy, hard work, discipline, responsibility, and obedience to the prevailing rules, both in the classroom and in society.

3.2. Discussion
Notes on observations of the integration of Nationalism values in learning at Miyauchi Elementary School, Hiroshima are very interesting to discuss. Apparently the school community in Japan, especially in Miyauchi Elementary School, Hiroshima is very appreciative of time and effective in utilizing the time. Students and teachers come in time, coupled with classroom atmosphere is very conducive, prove it. Cultural values of the nation are also upheld. This is seen when students are asked questions by the teacher, before answering, the students stand up first, then the students bend, answer, and bend again, the students sit back in their seats. All students do the teacher's job in an orderly, fair, honest, independent, and responsible manner. At the end of the lesson, the students also came out in an orderly manner and did not find students scrambling out of the classroom. This finding is in accordance with the writings of Gusarova (2015) and Junaedi & Syukur (2017) who wrote that Japanese students have a good character.

Character education in any country should start at an early age. Establishing a good character for a person is a long process to change a student's identity to better qualify his intellect, speech, and actions. The existence of character values in the learning process in Japan has an important role as a
spreader of the nation's culture as a manifestation of a sense of nationalism. Japanese society itself is also orderly on the highway. Obey traffic rules, There is no or rarely theft, and always polite in the association.

Benefits that can be taken are: (1) bring to us all the need for the community to educate the values of the character of each family. (2) Students from an early age have been introduced to Indonesian culture, so that they will love the nation and country more and more. (3) Teachers and students must also train themselves to maintain discipline in obeying all existing rules.

4. Conclusion

Based on the results of the research that has been described above, then the conclusion is as follows. (1) Teachers at Miyauchi Elementary School, Hiroshima did not include the character values that should be integrated into the Lesson Plan, but in its actions, the values of nationalism and integrity have been reflected. (2) The value of nationalism appears when Japanese cultural traditions arise in the practice of learning, such as bowing. (3) The value of integrity also arises in the process of mathematical burning. This is visible when students are assigned, students do it honestly full of responsibility and discipline with time. As recommendation, the results of research on character values that exist in elementary schools in Japan, can be applied to elementary students in Indonesia.

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