Spatial Citizenship Characteristics of Senior High School Students in Geography Learning in Indonesia

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Abstract. In senior high school, students in geography subjects need to have spatial citizenship skills. This study aims to determine how the characteristics of spatial citizenship in students in geography subjects. The research subjects were geography subject students in SMAN 1 Sukoharjo. The method in this research is descriptive qualitative. Methods of data collection using observations, interviews, and questionnaires. The data analysis technique used is interactive analysis. The results of the study can be concluded that the concept of spatial citizenship is associated with space that is practiced in daily practice, carried out by students in the very frequent category as much as 1.20%; often as much as 37.35%; sometimes as much as 59.04%; and never as much as 1.20%. The concept of spatial citizenship is associated with space in doing mobility, carried out by students in the very frequent category as much as 10.84%; often as much as 63.86%; and sometimes as much as 22.89%. The concept of spatial citizenship is spatially referenced not physically but associated with regionalization by students in the very frequent category as much as 1.20%; often as much as 27.71%; sometimes as much as 63.86%; and never as much as 6.02%.

Keywords: Spatial Citizenship, Geography Learning, Disaster Prone.

1 Introduction

As one of 35 disaster-prone countries in the world, Indonesia must pay attention to this condition. It is necessary to provide well-structured disaster mitigation from early childhood education to senior high school[1]. The concept of theory and practice on disaster mitigation has been included in the learning curriculum, both in the core curriculum and as a local content curriculum[2]. Including the curriculum in senior high school, the concept of disaster mitigation is introduced to students, especially students in the geography learning in senior high school. High school students must have spatial citizenship skills that can be used in life in society[3]. Under the essence that humans are social creatures, they must respect, respect, and have high sensitivity with fellow humans. Humans cannot live alone without the help of others. Humans who live with other people in society must maintain harmony and social sensitivity[4]. This condition of society is expected when dealing with natural disasters. Based on this phenomenon, senior high school, especially in the geography learning, needs to

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be introduced to the concept of spatial citizenship. The concept of spatial citizenship has not been widely introduced in Indonesia, both in geography learning in secondary education and higher education[5]. In geography learning, learning outcomes are still mostly in the ability to recognize physical aspects, not much achievement in social aspects. The social aspects that students have after taking geography lessons are still just mastering human interaction and distribution patterns in certain areas. The learning achievement is still not optimal, as social sensitivity as a good citizen[6].

When studied more deeply, spatial citizenship can actually be known and analyzed for each student. The ability of spatial citizenship actually exists in humans, it's just that the level has not been developed properly[7]. The role of teachers in learning geography is how to optimize these abilities. Teachers can explore students' spatial citizenship skills through classroom observations both online and offline[8]. This observation is easier to do face-to-face, but during a pandemic, no one knows when it will end, so observations are made through virtual zoom meetings. Through observation, teachers will gradually know the parts of spatial citizenship. Besides observations, the teacher can perform spatial data collection regarding citizenship by distributing questionnaires to most students then analyzed the results. However, it should be noted that, by distributing questionnaires, teachers still have to make observations. Understanding the concept of spatial citizenship is very useful for students studying in geography with the aim that students understand their role to have sensitivity and concern for the community in the living space. The explanation of the concept of spatial citizenship is motivated by the ability to think spatially. Spatial thinking in collaboration with the principles of geography can build students' reasoning abilities. Students by optimizing spatial thinking skills will become more scientifically responsible in using geographic information to identify current problems and carry out the communication process effectively[9]. The ability of students to apply spatial thinking skills will help fulfill the need for scientific thinking in creating works and ideas. Students have an obligation to study journals in order to develop scientific thinking skills. Through the activity of studying this journal, it will help students activate the zone of proximal development towards optimizing critical thinking, which indirectly has an influence on the ability to build scientific concepts[10]. Students present as agents of change must be able to become problem-solvers for the community. The concept of spatial citizenship then emerged as an ability that must be mastered by students in order to partner with the community. With the increasingly advanced development of globalization, it turns out to have a major impact on people's interactions with geographic concepts. Identity and the struggle for why humans live need to be understood by every human being, one of them by using a geographical perspective. Relationships between humans as social beings are introduced in geography learning competencies. The existence of interdependence between humans in this social space is an important insight to be raised in the theme of geography learning. These insights are related to social, political, cultural, economic which can impact society[11]. In diverse community conditions, spatial citizenship skills need to be developed so that the level of community participation increases. Students can do this by improving their communication skills through the use of maps because spatial communication through map symbols is an integral part of spatial citizenship[12].

In social life, forms of participation are needed to understand the phenomenon of the region as a social space with all its representations and a communication system in social space. Characteristics of spatial citizenship that can be measured and observed in students are: 1) actions that are carried out in daily activities, 2) people may not be permanent in space because they always carry out mobility, 3) are spatially referenced in regionalization, 4) using symbols in space to be used as rules, 5) being carefully understood, 6) having shared responsibilities within community groups in symbolic, spatial, and ideological meanings[13]. From the results of observations and in-depth analysis, the authors conclude that the characteristics of spatial citizenship that need more attention in this study are: 1) actions are taken in daily activities, 2) people may not be permanent in space because they always carry out mobility, and 3) spatially referenced in regionalization. The reason the author limits to these three characteristics are that every human being in his life must take action. This action is part of daily behavior to meet all needs. Through action, humans are encouraged to perform various mobility. This mobility is interpreted as the movement of humans in the social space. The process of human mobility between regions is limited by certain regions. These are the three main reasons used by the author to describe the characteristics of students' spatial citizenship abilities.

Strengthening the mastery of spatial citizenship skills is needed for students, especially in countries where natural disasters often occur. Indonesia, as a country prone to natural disasters, requires the readiness of its people to master disaster mitigation. The problem is that not all people have knowledge of disaster mitigation. It is known that some Indonesian people do not all go to higher education. Therefore, students who study in senior high school must convey their knowledge to the community, especially the ability of spatial citizenship.

2 Method

Research related to the spatial citizenship characteristics of students in this disaster-prone country uses a qualitative descriptive method[14]. The author chose the qualitative descriptive method because the writer wanted to present the data as it was regarding the characteristics of student spatial citizenship, with no manipulation process[15]. The author uses the subject students who study in the geography lesson at SMAN 1 Sukoharjo. The research data collection process was carried out for 2 weeks, from June 5th, 2023 to June 19th, 2023. The purpose of choosing a descriptive is to present a complete picture of the social setting for exploration and clarification of the existing reality. The technique used is to describe several variables related to the problem and unit of analysis under study. The author conducts a description of the student's spatial citizenship to get an overview based on indicators that have been systematically arranged and relate to the phenomenon being investigated. The author also distributes a questionnaire that is given online to students in order to be effective in getting data about the characteristics of students' spatial citizenship.

The data analysis technique used by the author is interactive analysis, which comprises data condensation, data presentation, and drawing conclusions or

verification[15]. Interactive model of data analysis consists of four components (see Fig. 1).

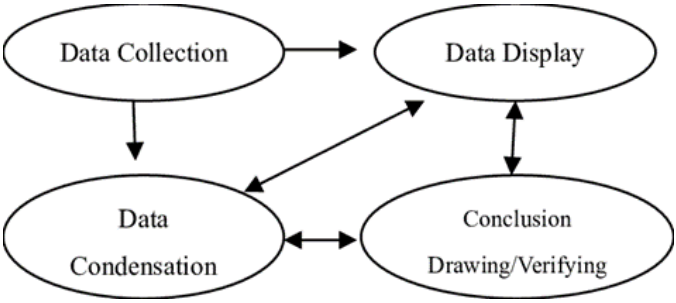

Fig. 1. Interactive Model of Data Analysis of Miles, Huberman, Sadana

Data from the questionnaires filled out by students were not all used in the analysis. The authors limit to three indicators related to action, mobility, and regional. This data reduction is carried out as a process for selecting, focusing attention, simplifying, and abstracting data that is too broad to make it more conical. The analyzed data is presented as visualization tables, graphs, or other forms so that the information can be easily interpreted and understood by others. The verification process is carried out after data processing is complete, namely by conducting in-depth interviews with informants. The informants used in the study were the management of the school and teachers.

3 Result and Discussion

Students of the geography lesson need to master the competence of spatial thinking well. Spatial thinking is part of the ability to declarative knowledge and operational cognitive perception, which functions to build and collaborate on new knowledge received by students[16]. Today's students are facilitated by easy access to technology. It is easy to learn spatial thinking skills quickly, accurately, and flexibly. Many online training activities during the COVID-19 pandemic are about spatial thinking[17]. Including free webinar activities that students can take part in to develop spatial thinking skills. This spatial thinking ability is the basis for developing students' spatial citizenship skills. Advances in computer and internet technology that are growing rapidly and increasingly sophisticated have provided great opportunities for students to learn to strengthen spatial citizenship. Students' spatial citizenship can be learned and is not an inborn factor.

Characteristics of spatial citizenship of students of geography lesson, the first is the concept of spatial citizenship associated with space which is practiced in the practice of daily actions, carried out by students in the very frequent category as much as

1.20%; often as much as 37.35%; sometimes as much as 59.04%; and never as much as 1.20% (see Fig. 2).

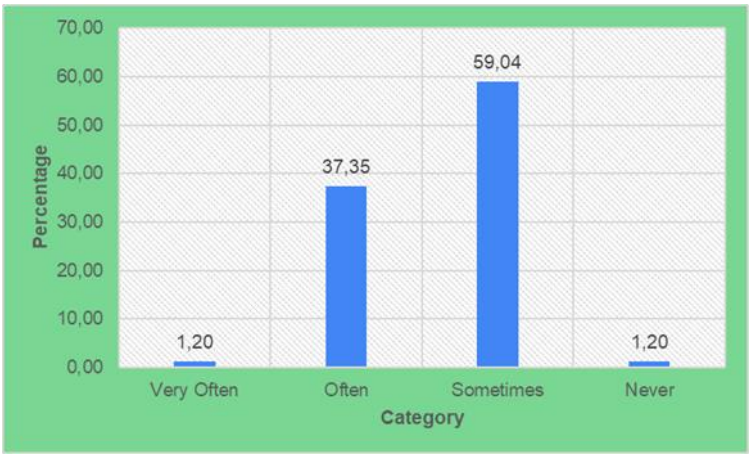

Fig. 2. Spatial citizenship is associated with space that is practiced in action.

According to Figure 2, it can be seen that geography lesson students have not carried out many activities to plan, negotiate, and communicate in the learning process. As seen in the graph, there are 59.04% of students only occasionally apply for spatial citizenship in their daily actions both on campus and in the community. Formulating, negotiating, and communicating what is practiced in action still needs to be further developed so that students have a level of social sensitivity as good citizens or society.

The second characteristic of spatial citizenship of Geography Education students is the concept of spatial citizenship associated with space in doing mobility carried out by students in the very frequent category as much as 10.84%; often as much as 63.86%; and sometimes as much as 22.89% (see Fig. 3).

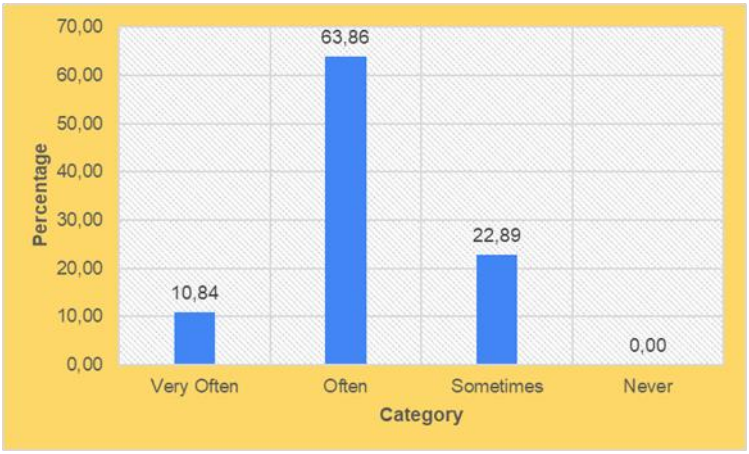

Fig. 3. Spatial citizenship is associated with space in doing mobility

According to Figure 3, it can be seen that geography lesson students are quite good at applying the concept of spatial citizenship in doing mobility. It can be seen in the graph that 63.86% of students are used to implementing spatial citizenship, which is associated with space in doing mobility. Formulating, negotiating, and communicating what students practice in daily mobility activities has been well developed so that students have a level of social sensitivity as good citizens or society. This is highly expected because achievements like this will realize solidarity and cooperation when a natural disaster occurs, where every citizen or community helps each other. Spatial characteristics of citizenship a third of geography lesson students is spatially referenced spatial citizenship does not physically but was associated with a category of students regionalization do very often as much as 1.20%; often as much as 27.71%; sometimes as much as 63.86%; and never as much as 6.02% (see Fig. 4).

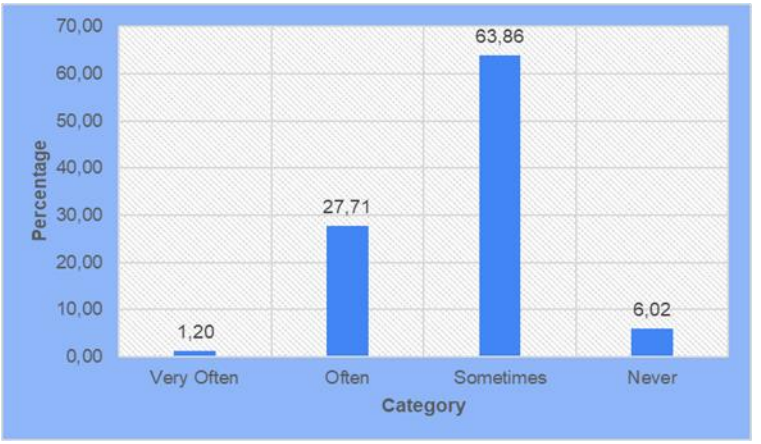

Fig. 4. Spatial citizenship in spatial associated with regionalization

According to Figure 4, it can be seen that geography lesson students have not carried out many activities to plan, negotiate, and communicate in the learning process associated with regionalization. As seen in the graph, there are 63.86% of students who only occasionally apply for spatial citizenship spatially associated with regionalization. Formulating, negotiating and communicating related to regionalization still needs to be further developed so that students have a level of social sensitivity as good citizens or society.

The ability of spatial citizenship is not only useful for students as an achievement of learning geography. Actually, spatial citizenship is universal and can be learned and mastered by everyone[18]. The social sensitivity of a citizen plays a very important role when a country is hit by a natural disaster. Speed of post-disaster handling is needed, and this is not only the government or volunteers. This is the collective duty of the entire community as good citizens. If all citizens have high dedication to their social space, an attitude of tolerance and cooperation will also be created.

Students who have dual roles, namely on campus and in the community, should realize the importance of spatial citizenship skills so that the knowledge and abilities they have must be conveyed to the general public[19]. The form of activities that can be carried out can be in activities that are community empowerment. Disaster mitigation education, which is increasingly complex and requires multidisciplinary, is a challenge for senior high school to prepare students who are more responsive to sustainable disaster education[20]. Henceforth, students and practitioners in senior high school have an obligation to collaborate on how to measure and assess the effectiveness of disaster education[21]. It is time for spatial citizenship skills to develop rapidly in Indonesia. Senior high school must be a pioneer in developing methods or digital media to provide disaster information. This is part of social sensitivity that has an important role in the digital age. The development of a website-based innovation system for disaster information is important to be developed in Indonesia, which goes through several stages, namely identifying and selecting attributes, assembling comprehensive computer applications, programming, system verification, and validation[22]. Many researchers are currently conducting research that focuses on comprehensive and long-term disaster management strategies, and this activity should ideally involve senior high school parties[23]. Likewise, spatial citizenship should ideally be developed by senior high school parties, from determining strategies, indicators, platforms that can be used, and technically how to use them. The goal is that spatial citizenship skills can develop well in Indonesia as part of the achievement of learning geography.

4 Conclusion

The characteristics of spatial citizenship is very important for teachers to know in learning geography. These characteristics can be identified and measured through several strategies, namely through the distribution of questionnaires containing indicators of spatial citizenship characteristics, observing students through cases that are raised as learning themes related to how to plan, negotiate, and communicate various problems that arise happening in society. In addition, as a reinforcement of the results of the questionnaire analysis and observation, is to interview with teachers who teach and interviews with students. Spatial citizenship skills have been developed in many European countries. Indonesia is one of the 35 highest disaster-prone countries in the world must immediately develop this spatial citizenship, especially in senior high school for geography lesson students who already have the capital of spatial thinking skills. Along with the rapid advancement of internet technology, students and teachers must collaborate to design a comprehensive and long-term disaster innovation system.

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