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Geography in early childhood social studies Learning: in the perspective of map reading needs in the era of globalization 5.0

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Abstract

Geography learning in early childhood today is still limited to the introduction of places, various disasters and seasons or weather. The implementation of geography learning in early childhood has not yet reached the perspective of the needs of the 5'0 era of globalization. It can be seen from the low ability of Indonesians to read maps. This is known through the literacy survey of PISA 2022- 2023 results, which states that Indonesia is ranked 68 out of 81 countries in the world (Syamsul, 2023). While the development of technology and globalization today humans are very dependent on the use of digital maps in everyday life. This research aims to find out what kind of geography learning is implemented in early childhood. Has geography learning referred to the need to read maps in the era of Globalization 5'0, namely accommodating spatial understanding in children. The research method used is descriptive qualitative research method. The result of this research is that geography learning in early childhood has not been carried out in accordance with the needs of reading maps in the era of globalization 5.0. The need to read maps in geography learning is very close to early childhood. Where the use of gmaps is an application that is used massively everyday so that it must be introduced from an early age.

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INTRODUCTION

Early childhood education is fundamental in shaping various aspects of development and forming human character. Scheinder, D. et al (2010) state that social studies is learning for students that aims to produce humans who are able to become the aspired civil society. As part of the aspired society, humans must be able to adapt well. To be able to adapt well, from an early age humans must have adequate social science. Included in the social science branch of early childhood geography which is holistic learning and cannot be separated from various other disciplines, especially branches of social science. During early childhood education, children should acquire learning that is functional to support the needs of human life in the present and the future, solutive, which can be applied to solve problems and can function in improving the quality of human life. This is in line with the statement that society 5.0 is a picture of the future where technology is used to provide solutions to social problems, improve our quality of life, and have a positive impact on society as a whole (UNDIKNAS, 2023)

In this era of globalization 5.0, it is time for educators and parents at home to introduce technology as a daily life solution that has a positive impact on children's growth and development. It is no longer a distraction and makes children passive so that it has a negative impact on children's growth and development. Currently, parents and educators are required to be sensitive to the needs of early childhood in terms of technology. Technology that is very often used in everyday life and becomes a solution in everyday life, one of which is the use of online-based navigation maps. Map reading in the era of globalization 5.0 is a skill that humans need as long as humans interact with technology. So learning geography in early childhood should also refer to the need for map reading skills. Branches of social science that are rarely delivered are economics, sociology, geography and global issues (Aprilyanti, D.S. 2023). There is an interview statement that "Social science introduced to children is how to make friends, have to share" (Aprilyanti, D.S. 2023) from the results of this study social studies learning including branches of social science, namely geography, one of which is still very rarely conveyed, so that educators' understanding of social science is still at the stage of social emotional development such as how to make friends and share.

The purpose of learning geography in early childhood education has various functions, namely forming spatial sensitivity, understanding culture, and environmental awareness. Geography in the context of forming spatial skills (Ridha et al., 2020), supporting cultural awareness (Minh et al., 2017) and environmental education changes (Ardoin & Bowers, 2020). From this statement, it can be concluded that learning geography in social science is not just about introducing various regions in Indonesia, but also how humans can maintain culture and care for the environment of the Indonesian homeland. By recognizing the geographical location of various regions in Indonesia, it is not only related to humans and culture, but also to various endemic plants and animals, environmental sustainability and the sustainability of life that develops in real terms. Learning that supports various aspects of development can result in better learning (Egert et al., 2018) and will relate to a better environment (Rousell & Cutter-Mackenzie-Knowles, 2020). So that with a variety of geographical knowledge will increase people's knowledge and concern for the environment in which they live.

Related to the ability to plan (Arthur et al., 2017), educators can combine geography with other learning content for better learning (Allen et al., 2018) for optimal child development educators also link geography learning with other learning in early childhood education, especially with social studies learning (Reynolds et al., 2017). This is to build a deep understanding of geography and a learning structure that holistically builds children's complete knowledge (Dunton et al., 2020; Yoshikawa et al., 2020). There are consequences of the COVID-19 period on the adaptation of educational needs in geography learning strategies and techniques in children (KIM, 2020), geography learning is also influenced by the uniqueness of children's character, the environment where children live and other environmental influences (Thomson, 2020; Bakken et al., 2017). Finally, geography plays a critical role in the formation of engaged citizens, culturally and environmentally aware of the future (žalėnienė & Pereira, 2021). Furthermore, related to the needs of the times and future needs, geography learning must refer to future needs, one of which is the need to read maps.

Building strong geography knowledge and map reading skills in early childhood education is a crucial

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STKIP SILWANGI BANDUNG
TUNAS SILIWANGI
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activity for children's overall academic development and spatial development. Research shows that children's ability to navigate and understand spatial symbols, such as those that often appear on maps, is strongly related to basic geometric understanding and navigation skills (Dillon et al., 2013). Geographic knowledge and basic map learning in the curriculum not only improves children's spatial functioning, but also reduces disparities related to gender and social economic status (Newcombe & Frick, 2010). At this time for the smooth running of daily activities humans are very dependent on technology including the ability to read maps electronically. In the electronic map, the search engine uses geographic terms and language in conveying directions such as northwest, north, and so on. Furthermore, in addition to the terms of these directions, spatial knowledge is needed to be able to read maps.

To have spatial skills, children need to be introduced to spatial learning related to cardinal directions (west, east, north and south), directions (right turn, left turn, straight, U-turn, etc.), distance estimates, blue, red and green paths and so on.Spatial symbols, such as maps, become a medium that serves to interpret abstract learning such as distance, angles, and other geometric concepts (Dillon et al., 2013). The results of children's use of spatial symbols can be seen in the way they explain directions and the development of excellent geometric concepts that are characteristic of spatial cognition into adulthood (Dillon et al., 2013). Uniquely human spatial representations, such as overhead maps, may provide a valuable opportunity for children to practice and refine their core geometry skills (Newcombe & Frick, 2010)

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This research uses descriptive qualitative methods. Qualitative research is a method for exploring and understanding the meaning that a number of individuals or groups of people ascribe to social or humanitarian problems (Creswell.J. 2016). Researchers took research samples at kindergarten institutions in Serang City. Researchers collected data through interviews and observations, and documentation of kindergarten teachers in Serang City. The data that has been taken is then processed by analyzing the data to obtain the hypothesis of the research results.

METHOD

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RESULTS AND DISCUSSION

Result

The purpose of this study is to investigate the extent to which early childhood social studies learning accommodates the need for map reading in the era of globalization 5.0. Early childhood social studies learning is a learning activity related to social science.

As said by Scheinder, D. et al (2010) states that social studies is learning for students that aims to produce humans who are able to become the civil society that is aspired to. In the branch of social science, namely geography, it is expected that people can use spatial intelligence for sensitivity in dealing with environmental conditions. In this study, researchers wanted to further examine school learning activities carried out to increase children's spatial abilities that are directed to be able to read maps in the future. The following is the data obtained in this research activity.

Table 1. Observation Results

Interview Table

Question	Topic	Source	Data Obtained
Are the children learning geography?	Geography Learning	RO	Yes
		TM	Yes
		PL	Yes
		SF	Yes
What kind of geography learning materials are delivered to children?		RO	Explained the map of Indonesia in the theme of my country or I love Indonesia and introduced the globe to the children.
		TM	Introducing regions in Indonesia
		PL	Delivering some provinces in Indonesia that are close to Banten.
		SF	It tells the story of several regions in Indonesia and their uniqueness.
Up to the current class B, what geography lessons have been delivered?		RO	Explaining the location on the map of Indonesia, introducing right and left with movements and songs.
		TM	Storytelling
		PL	Show the location of blood on a map.
		SF	Show a learning video about regions in Indonesia.
Do students get spatial learning?	Spatial Learning	RO	Playing with legos, blocks, playing tangram puzzles, painting a coloring object.
		TM	Science of flowers blooming on water
		PL	Teaching right and left
		SF	Coloring, playing with legos and blocks

TUNAS SILIWANGI
P-ISSN : 2476-9789 E-ISSN: 2581-0413
Volume. 11, Number. 1, April 2025

What spatial learning does the child get at school?		RO	Yes, Play lego, blocks, play hide and seek, play tangram, coloring, painting objects
		TM	Yes
		PL	Remembering left and right, front and back.
		SF	Knowing colors, knowing different shapes and so on.
The extent of early childhood spatial understanding	Spatial Understanding in Children	RO	Understand objects, understand directions, imagine, remember, or think in visual form
		TM	Study at home
		PL	The child recognizes left and right, front and back although sometimes left and right are still reversed.
		SF	Children recognize colors, shapes and left and right.
Have you ever introduced map reading to young children?	Introduction to map reading in children	RO	Once, introduced the names of provinces and their locations through a map
		TM	Yes. Indonesia
		PL	Map of Indonesia
		SF	Yes Map of Indonesia

Table 2. Observation Results

Observation Table

Learning material	**Point of Introduction**	**Yes/No**			
		RO	TM	PL	SF
Spatial Recognition	Side or corner (right/left/front/back)	Yes	Yes	Yes	Yes
	Directions	No	No	No	No
	Estimated Distance	No	No	No	No
	Identifying symbols/colors	Yes	Yes	Yes	Yes
Map Reading	Cardinal Directions	No	No	No	No
	Recognizing Patterns	Yes	No	Yes	Yes
	Remembering Symbols/Pictures	Yes	Yes	Yes	Yes
	Follow the path	Yes	Yes	Yes	Yes

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JURNAL PROGRAM STUDI PENDIDIKAN GURU PAUD
STKIP SILWANGI BANDUNG
TUNAS SILIWANGI
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In answering the problem formulation and research questions, the research results must be concluded explicitly. Interpretation of the findings is carried out using existing logic and theories. Findings in the form of reality in the field are integrated/linked with the results of previous research or with existing theories. For this purpose there must be a reference. In generating new theories, old theories can be confirmed or rejected, some may need to modify theories from old theories.

Discussion

Geography in early childhood social studies learning: in the perspective of the need to read maps in the era of globalization 5.0 is one of the learning objectives that is rarely conveyed. The learning objectives of geography in early childhood education have various functions, namely forming spatial sensitivity, understanding culture, and environmental awareness. Geography in the context of forming spatial skills (Ridha et al., 2020), supporting cultural awareness (Minh et al., 2017) and environmental education changes (Ardoin & Bowers, 2020). In line with the results of this study, all resource persons, namely teachers, feel that they have made efforts and organized geography learning in early childhood. With the theme I love Indonesia in early childhood learning, teachers conduct geography learning through the introduction of regions in Indonesia, the province where students live, the regions in Indonesia and their uniqueness (RO, TM, PL and SF). Until students are in Class B, teachers provide learning through pointing out regions and places through maps, through movements and songs, learning videos and telling stories about geography in Indonesia. Learning that supports various aspects of development can result in better learning (Egert et al., 2018) and will relate to a better environment (Rousell & Cutter-Mackenzie-Knowles, 2020). To optimize geography learning that can be used for map reading needs in Era 5.0 so that students can read directions it is not enough just to tell stories and see learning videos they need spatial learning. Spatial skills, children need to be introduced to spatial learning related to cardinal directions (west, east, north and south), directions (right turn, left turn, straight, U-turn, etc.), distance estimates, blue, red and green lines and so on. Spatial symbols, such as maps, become a medium that serves to interpret abstract learning such as distance, angles, and other geometric concepts (Dillon et al., 2013), 2013). The results of children's use of spatial symbols can be seen in the way they explain directions and the development of excellent geometric concepts that are characteristic of spatial cognition into adulthood (Dillon et al., 2013). The results of the interview show that what students get related to spatial learning is playing lego, blocks, playing hide and seek, playing tangram, coloring, painting objects (RO), science flowers blooming (TM), remembering right, left front and back (PL) and knowing colors and shapes (SF). Observations show that teachers introduce sides or angles (right/left/front/back), and identify symbols/colors. As for introducing directions and distance estimation, it has not been done yet. Research shows that children's ability to navigate and understand spatial symbols, such as those that often appear on maps, is closely related to basic geometric understanding and navigation skills (Dillon et al., 2013). Geographic knowledge and basic map learning in the curriculum not only improves children's spatial functioning, but also reduces disparities related to gender and social economic status (Newcombe & Frick, 2010).

In this spatial learning activity, it can be seen that spatial learning efforts have not been carried out optimally. Some teachers still consider spatial as science learning, then consider introducing right, left, front and back is enough as a provision for spatial learning. Previous research announced that the introduction of maps and navigation is related to the understanding and knowledge of geometric principles, such as distance and angle (Dillon, 2013). The results state that 4-year-olds may find it difficult to integrate distances and angles on maps, so at this age children need guidance and direction through concrete and contextual activities. If spatial learning is not carried out until children grow up, it becomes an answer to why map reading skills in Indonesia are still low.

The researcher then asked again what kind of spatial learning activities were carried out at school, RO stated understanding objects, understanding directions, imagining, remembering, or thinking in visual form, learning at home (TM), Children recognize the left right side, front and back although sometimes left and

TUNAS SILIWANGI
P-ISSN : 2476-9789 E-ISSN: 2581-0413
Volume. 11, Number. 1, April 2025

right are still reversed (PL) and Children recognize colors, shapes and left and right (SF). To be able to answer the needs of geography learning in an effort to support map reading skills 5.0 requires increasing teacher knowledge of geography learning components for early childhood. The results of observations show that students and schoolgirls get learning to read maps through children's worksheet learning where children learn to remember symbols or images, follow paths or grooves or commonly called maze worksheets, and recognize patterns through worksheets. The component of map reading skills that is not delivered is recognizing cardinal directions. So let alone to recognize the map, the direction of sunrise and sunset alone many students still feel confused. This is an input for education in Indonesia that basic geography learning really needs to be delivered or even become material in the learning curriculum in early childhood education.

CONCLUSION

To achieve map reading skills, environmental adaptability, as well as better learning that is integrated with life needs is not only the responsibility of the teacher. However, in learning activities the teacher is the spearhead of determining the delivery of learning activities that are in accordance with the needs of children in the future. It takes an understanding of terms in science, learning materials that are in accordance with the needs of children's development and growth and learning that will support the improvement of life skills. Geography learning in early childhood that refers to the knowledge skills of map reading needs can still be developed and optimized through various fun learning activities, both through play activities, map reading practice activities, and so on. It also requires both electronic and non-electronic learning media that can make it easier for children to learn geography learning components. By introducing geography learning from an early age, children will gain concrete experience in recognizing various terms in geography learning. Students will also be better prepared in learning to read maps and recognize navigation in the future.

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TUNAS SILIWANGI
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Volume. 11, Number. 1, April 2025

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