Jurnal Teknologi Pendidikan:
Jurnal Penelitian dan Pengembangan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jtp/index

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

The Use of Tiktok Application in Geography Learning Based On Project-Based Learning in Improving Students' Creative Thinking Skills in Public High School 16 Bandar Lampung

Raysa Deagustami*, Risma M. Sinaga, Pujiati
University of Lampung
Corresponding Author e-mail*:deagustami.raysa@gmail.com

Abstract: This study aims to explore the use of TikTok application as a learning media in improving students' creative thinking skills at SMA Negeri 16 Bandar Lampung, especially in geography subject. The phenomenon that occurs shows that learning in high schools still focuses on basic thinking skills, so a more innovative approach is needed to develop higher-level thinking skills. Through qualitative research methods, data was collected from interviews with students and document analysis. The results show that the use of TikTok can attract students' interest and provide a fun learning experience, thus encouraging them to more actively seek information and understand the material, especially regarding the dynamics of the lithosphere. In addition, project-based learning integrated with social media is proven effective in honing students' creative thinking skills, including aspects of fluency, flexibility, originality, and elaboration. This research recommends the application of more varied and creative learning methods to improve the quality of education in the digital era.

Article History
Received: 16-10-2024
Reviewed: 16-01-2025
Published: 22-01-2025

Key Words :
TikTok, geography learning, creative thinking skills, Project Based Learning.

How to Cite: Deagustami, R., Sinaga, R., & Pujiati, P. (2025). The Use of Tiktok Application in Geography Learning Based on Project-Based Learning in Improving Students' Creative Thinking Skills in Public High School 16 Bandar Lampung. *Jurnal Teknologi Pendidikan : Jurnal Penelitian dan Pengembangan Pembelajaran, 10*(1), 8-29. doi:https://doi.org/10.33394/jtp.v10i1.13238

https://doi.org/10.33394/jtp.v10i1.13238

Introduction

Education plays an important role in the development of a nation. The goal is to develop the ability to shape the character and civilization of a dignified nation in order to educate the nation's life. Education aims to develop human beings who are faithful and devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. (Margaretha, 2022); (Higgins, 2015).

The development of technology and science today has brought many changes to aspects of life, especially human resources. In essence, education is a means of developing human resources for the better. Future challenges that continue to change along with the times also require abilities that are not only skilled in one field, but also skilled in other fields and creative in developing them, so that to improve the quality of education, the thing that must be done is also to improve the quality of human resources.

Geography learning in the 21st century and the independent curriculum aims to expand students' skills in maintaining attitudes and knowledge skills, while developing systematic abilities to master the reality of the geosphere, able to solve problems that stand

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

out as a result of the relationship between humans and their environment. A geographical perspective is an area that uses a spatial context that explores the region and the phenomena within it. By mastering these competencies, learners can help them to be more innovative and competitive in the 21st century.

Geography learning at school is expected to be able to educate students with a variety of abilities and skills as a provision of knowledge for students in the future. In addition, students are able to compete healthily using their abilities and skills to achieve what they aspire to. The purpose of learning geography at school is to understand spatial, environmental and territorial patterns and related processes (Permendiknas Number 22 of 2006 concerning content standards).

Geography helps learners orient themselves in the world and understand how people and places interact. Some of the knowledge that learners need to succeed in the future when facing increasingly complex battles is the ability to think creatively. The most important thinking skill is creativity. In the school environment, there are still many teachers who give lessons using methods or ways of teaching that are dominant to the teacher so that the creativity of students is less considered in learning geography. Most teachers focus on talks that use logic and assume that creativity in geography learning is not very important Siswono (2004). Teachers try to provide as much information as possible and students are used as learning objects, so learning tends to be monotonous and students do not have the opportunity to reflect on the learning provided by the teacher.

Teachers no longer act as the highest authority in learning, but as facilitators and motivators who guide students to be more active, innovative and creative in learning. Based on the independent curriculum, teachers are required to encourage and direct students so that they are able to be directly involved in the development of science and technology today. Teachers are required to always be creative in dealing with problems in education, including through the use of learning media which aims to prevent students from experiencing boredom in the learning process which is one of the obstacles in improving student learning outcomes. Various breakthroughs in learning media are available but only a few can be maximized to improve student learning outcomes, starting from learning media from the government or media created by the teacher himself.

Based on the results of preliminary observations at SMA Negeri 16 Bandar Lampung, which was conducted on April 14, 2023. During the observation activities, the data found that so far the teacher has applied the learning model well, but has not varied and there is no creative learning design so that students cannot bring out ideas in the learning process. In addition, educators only use media in the form of powerpoints and textbooks, then students take notes so that the learning process does not attract creative students, while in the digital era like today, the existence of smartphones and internet connections makes it easier for people to get various information from various topics. The number of applications and sophistication can be utilized in positive ways such as tutorial information, reviews, shopping, and learning. With the TikTok social media platform, it can be an option to be used as a creative learning media.

Seeing the above problems, in an effort to improve students' creative thinking skills, geography teachers use technology-based learning media that is currently in great demand by students, namely the TikTok application. This is supported by data obtained from initial questionnaires to students, namely as follows:

Table 1. Results of Questionnaires of Learners' Interest in Using Social Media

Jurnal Teknologi Pendidikan:
Jurnal Penelitian dan Pengembangan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jtp/index

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

Social Media	X.1	X.2	X.3	X.4	X.5	X.6	Total
YouTube	13	10	13	12	10	13	71
TikTok	8	15	11	14	16	12	76
Instagram	7	5	7	4	5	5	33
Whatsapp	7	3	3	4	3	2	22

Source: Personal Documents

Of all the class X students totaling 206 students, it is known that class X.5 uses TikTok social media the most as an interesting and efficient learning media used by students. TikTok is an audio-visual application that provides pedagogical capabilities, realistic experiences, increased motivation, and involvement of learners as creators (Koumi, 2015). It is also great for supporting learners' creativity (Jung and Zhou, 2019). TikTok application can be implemented as a learning media. Seeing the various features that exist in the TikTok application, it is possible to be designed as a geography learning media which in this case focuses on the creative thinking ability of students who need learning by involving learning media in it.

Based on the results of preliminary observations at SMA Negeri 16 Bandar Lampung on April 14, 2023 in class X. 5 as many as 34 students during the learning process there were 20 students or 58.8. % who did not pay attention when the teacher asked questions, only a few students were able to answer around 10 people or 30% of students. Based on the creative thinking domain according to Darwanto (2019) most students have not mastered indicators such as fluency, flexibility, and elaboration, students are only able to master indicators of originality, this is because students tend to be confused, do not believe in their own answers, Likewise, the answers given by students are still focused on books and trying to see the answers of their friends compared to thinking for themselves what the answer to the question is, most students rarely ask questions and express opinions, so that in the classroom during the learning process it is still very passive and does not show the creative thinking ability of students.

Based on the results of interviews with geography subject teachers, namely Mrs. Az. so far the teacher has applied the learning model well, but has not varied and there is no creative learning design so that students cannot bring out ideas in the learning process. The models applied so far include conventional learning models, JAS models, and concept map models and do not use modern technology that is currently developing, namely TikTok social media. Furthermore, he also said that lithosphere material is considered difficult by students because there are many sub-themes and images of various layers of the earth that are very difficult for them to understand.

Based on the results of interviews with several X.5 class students at SMA Negeri 16 Bandar Lampung, they said there were several materials that they still did not understand, one of which was the material on the dynamics of the lithosphere. For them, lithospheric material is abstract material and uses a lot of Latin and also they do not clearly understand how the layers of the earth's surface and the processes of endogenous and exogenous forces occur. They said that geography learning so far has been the teacher explaining, memorizing material, answering questions from printed books, and writing notes. They hope that for the future the explanation will be improved, using fun ways of learning and using learning media in the form of interesting videos, fun videos so that students can see directly and understand how the material on the dynamics of the lithosphere is explained.

Jurnal Teknologi Pendidikan:
Jurnal Penelitian dan Pengembangan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jtp/index

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

Creative thinking skills are one of the basic assets that must be possessed by students to face competition in the global era. The ability to think creatively in learning needs to be developed to achieve national education goals. Creative thinking skills form learners who are able to express and elaborate original ideas for problem solving. Creative thinking skills developed in learning include aspects of fluency thinking skills, flexibility thinking skills, originality thinking skills, and elaboration skills. (Hawadi 2008 and Puspitasari 2012).

One of the learning models that is in accordance with government regulations and in accordance with Vygotsky's learning theory is project-based learning. Depdiknas (2003) (in contextual learning concepts and applications: 70) asserts that "project-based learning or structured tasks is a learning approach that requires a comprehensive learning where the learning environment of students in the classroom is designed so that students can investigate authentic problems including deepening the material of a subject matter, and carry out other meaningful tasks". This approach facilitates learners to work independently in shaping learning, and applying it in real products.

Project-based learning is a learning method that uses projects or activities as learning media. Learners are required to conduct exploration, assessment, interpretation, synthesis, and information to produce various forms of learning outcomes. In this learning model, the teacher acts only as a facilitator and the learners set the project objectives. In the learning process using this project-based learning model, it usually takes a lot of time to solve a problem, to overcome this, educators facilitate students to solve problems, limit students' time in completing projects, minimize and provide simple equipment and are found in the surrounding environment, and choose a research location that is easy to reach so it does not require a lot of time and money.

The ability to think creatively will lead to creativity as a result. Creativity is a person's ability to produce something new, both in the form of ideas and real work that is relatively different from what has existed before, (Ambarjaya 2008 and Puspitasari 2012). In the learning process not only students who try and work hard to gain knowledge, but teachers are also very required to try and work hard to realize the knowledge taught in order to achieve goals, one of which is by choosing the right learning model and in accordance with the material so that students can be directly involved, because the learning model greatly affects the achievement of a learning process, especially social studies lessons.

The ability to think creatively in today's modern era is something that students must have in learning and applying geography learning. Learners are required to have the ability to think logically, analytically, systematically, critically, and creatively. All of these abilities make students more developed and are expected to create new ideas. The ability to think creatively is very important for students which is in accordance with Government Regulation No. 19 of 2005 containing National Education Standards Article 19 paragraph 1 that the learning process in educational units is organized interactively, inspiring, fun, challenging, and motivating students to actively participate, as well as providing sufficient space for initiative, creativity and independence in accordance with the talents, interests and physical and psychological development of students.

Creative thinking is a skill needed in the face of rapid advances in science and technology. Experts argue that the definition of creative thinking is a series of cognitive learning that each individual uses in accordance with certain objects, problems and conditions based on their individual capacity to bring up imagination, intelligence, insight and new ideas, (Birgili 2015). Creative thinking is the ability to capture opportunities for events or

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

provide new perspectives so as to create renewal ideas that have never existed. This ability must be supported by various factors, among others, in learning geography, there needs to be consistent practice or habituation and supporting literacy as a reference. (Musfiqi and Jailani, 2020).

The ability to think creatively is formed by several factors, these factors are divided into internal factors and external factors. Internal factors come from individuals who have the ability to absorb knowledge quickly, the existence of motivation and interest in learning. External factors come from influences outside the individual that can change the level of creative thinking ability, such as the habituation of routine problem exercises and an environment that supports the creation of a creative mindset. Andiyana, Maya and Hidayat (2018).

Creative thinking skills can be seen from the process of solving problems in various ways, creative thinking skills can be developed through exercises that refer to the development of students' creative thinking. The creativity of students in learning geography becomes a reference for students in solving geography problems by using their own way of solving. So that creative thinking is needed in learning geography so that students are able to solve complicated problems.

The phenomenon that occurs among most high school students in my research in 2023 at SMA Negeri 16 Bandar Lampung is that learning activities in secondary schools still emphasize changes in thinking skills at the basic level, not maximizing students' higher-level thinking skills. The ability to think at a high level is also very important for mental development and changes in the mindset of students so that it is hoped that the learning process can be successful, for this reason researchers utilize TikTok social media as a means or learning tool to increase the ability to think at a high and creative level of SMA Negeri 16 Bandar Lampung students.

Research conducted by Taubah, M, (2020) TikTok application can provide convenience and flexibility to its users, especially in the ability of students' listening skills. Based on this data, this application can be a big enough opportunity if it can be utilized properly for learning media. TikTok can be accessed by students anywhere and anytime online easily and affordably and can also be used as a learning resource for students independently. Learning videos shared on the TikTok application are also able to attract students' interest and create new experiences that can increase students' creativity.

In addition, students will be more eager to find the information needed in learning geography, especially in lithosphere subjects. TikTok social media has a lot of information about an event or phenomenon from various accounts that disseminate information. TikTok social media is an alternative to learning for students because students can independently find and express information. In addition, by using TikTok social media, students are directed to utilize technology properly and correctly in the learning process so that TikTok becomes an interesting and interactive learning media for students and can be implemented as a geography learning media, especially in lithosphere material.

The use of the TikTok application in project-based learning geography learning in this study will be carried out in class X.5 on lithospheric material with indicators of volcanism material because this material explains the layers and processes of endogenous energy that occur in the layers of the earth, so that with the use of the TikTok application based on project-based learning, students are expected to be able to understand the material through the resulting product, namely in the form of a miniature volcano project, where students will

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

demonstrate the process of volcanic eruption through miniature projects with materials and tools that have been previously prepared from home. The implementation of project-based learning in general which will be a guideline in this study starts from determining the project, project planning, preparing a schedule, monitoring project progress, project publication and project evaluation (Fathurrahman, 2016). This study aims to analyze the use of tiktok application in project-based learning geography learning in improving students' creative thinking skills.

Methods

This research used mixed methods. In this step, the research combined two previous approaches: qualitative and quantitative research. According to Creswell, mixed research is an approach that combines qualitative and quantitative research. Sugiyono (2010) said that quantitative and qualitative research should be used together to get more comprehensive, valid, accurate, and objective data. The research was conducted at SMA Negeri 16 Bandar Lampung, involving 32 respondents as the research sample. Data analysis techniques researchers use interviews, observation and documentation techniques.

Research Results And Discussion

Research Results

The results of research conducted at SMA Negeri 16 Bandar Lampung show some important findings related to learning using the TikTok application based on Project Based Learning (PJBL). Before the application of this method, there were problems in the classroom, such as lack of student interest and some students chatting during learning. However, with the application of the new method, it is expected that this condition can be improved. The Project Based Learning (PJBL) method was well received by students. They felt that the project helped them understand the material and motivated them to work together and do research.

The implementation of making a miniature volcano through project-based learning geography learning at SMA Negeri 16 Bandar Lampung based on the exposure of the geography teacher concerned which is supported by the results of observations during the learning process carried out in April to May 2024 is in accordance with the project implementation module that has been prepared by the teacher before the learning activities take place which is also adjusted to the syntax of project-based learning. The activity starts from introductory activities, core activities and closing activities. The following is a chart related to the implementation of activities using the TikTok application application based on project-based learning to make miniature eruptions of Mount Merapi to measure the creative thinking ability of students at SMA Negeri 16 Bandar Lampung.

The planning for the implementation of project-based learning in making miniatures of Mount Merapi using TikTok social media was carried out for 3 meetings, the results of interviews with teachers, the results of observations during learning can be analyzed that the syntax of geography learning using TikTok social media based on project-based learning shows the essence of classroom learning in honing students' critical creative thinking skills and increasing their motivation and involvement directly about teamwork and creativity in learning and helping students understand geography material better through interesting visualizations so that it can provide a more meaningful learning experience in the classroom. Interview data with students shows that the use of TikTok in learning helps them understand the material better. They feel that TikTok makes learning *more interesting and easy* to

Jurnal Teknologi Pendidikan:
Jurnal Penelitian dan Pengembangan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jtp/index

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

understand through visualization. Students also stated that the material about volcanism can be illustrated well through short videos, which helps them remember the information.

Figure 1: Implementation of the activity of making a miniature Mount Merapi
Based on the results of research conducted on class.

Table Data on Students' Creative Thinking Ability based on Project Based Learning using the TikTok Application.

Tabel 2. Data on Students' Creative Thinking Ability based on Project Based Learning using the TikTok Application

No	Aspects of Creative Thinking Skills	Rated Indicator	Average	Description
1	*Fluency* (Fluent thinking ability)	a. Work well	75	Creative
		b. Quickly spot project errors	82,5	Very Creative
		c. Easy to think of project ideas	82,5	Very Creative
		d. Smooth execution of the project with excellent time provisions	75	Creative
		Average	**78,75**	**Creative**
2	*Flecibility* (Flexible thinking ability)	a. Provide a variety of appropriate use of materials towards the project	62,5	Creative Enough
		b. Thinking of different ways to complete the product	70	Creative Enough
		c. Designing products in different ways	75	Creative
		Average	**69,17**	**Creative Enough**
3	*Originality* (Original thinking ability)	a. Thinking of things that others do not think of	57.5	Less Creative
		b. Questioning old ways and trying to think of new ways	62.5	Creative Enough
		c. Developing the manufacture of products made by others	62.5	Creative Enough
		Average	**60.83**	**Less Creative**
4	*Elabotasy*	a. Create a TikTok video related	87.5	Very Creative

Jurnal Teknologi Pendidikan:
Jurnal Penelitian dan Pengembangan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jtp/index

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

No	Aspects of Creative Thinking Skills	Rated Indicator	Average	Description
	(Elaboration thinking ability)	to the project		
		b. have justifiable reasons for reaching a decision	62.5	Creative Enough
		Average	**75**	**Creative**
5	*Evaluation* (creative thinking skills)	a. considers his own point of view	**71,0**	Creative
		b. Defending an opinion and sticking to it	**72,0**	Creative
		c. Able to make decisions on open-ended situations	**77,0**	Creative
		Average	**73,,0**	**Creative**
	Total		**355,6**	
	Percentage		**71,1**	**Creative**

Source: Excel processed data

The level of implementation of geography learning using TikTok social media based on project-based learning to measure the creative thinking skills of students at SMA Negeri 16 Bandar Lampung which has been carried out based on project-based learning syntax in general obtained results in the creative category. This is indicated by data from table 4.6, it is known that the percentage data on the results of students' creative thinking skills using the TikTok application based on the project-based learning model. in learning geography volcanism material, the result is 71.67% with a creative category. Apart from the overall average, we can also note each aspect in the table above. The average of the five aspects of students' creative thinking skills using the project-based learning model in Geography Learning Volcanism material is included in the creative category with a percentage of 71.67%.

The percentage of students' creative thinking skills using the Project Based Learning model can be seen in the following figure.

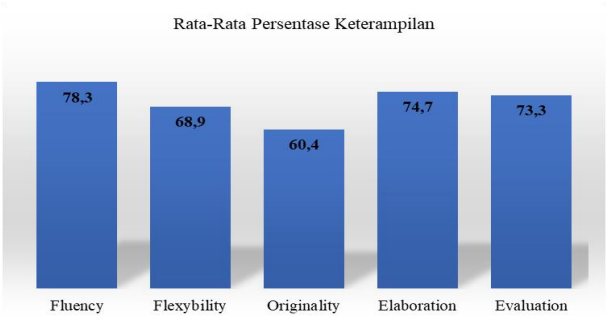

Figure 2. Comparison of Percentage of Creative Thinking Skills Indicators

Based on Figure 4.4 above, it shows that the average percentage of aspects of creative thinking skills that are the highest is the Fluency aspect (fluent thinking skills) with a percentage of 78.75%, the second highest aspect is the Elaborasy aspect (elaboration skills) with a percentage of 75%, the third is the Evaluation aspect (evaluation skills) with a percentage of 73.33%, the three aspects are included in the creative category, while the

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

lowest percentage is the Oryginality aspect (original thinking skills) with a percentage of 60.83% and the Flexybility aspect (flexible skills) including less creative.

Discussion

The implementation of geography learning using TikTok social media based on project-based learning in this study refers to the tradition of social studies learning because it is carried out in social studies learning activities. The learning tradition in question leads to the tradition of social studies as reflective inquiry. The tradition of social studies as reflective inquiry is a tradition of social studies learning that trains students to develop and use reflective thinking skills in the form of critical thinking, inductive, problem solving, scientific research, value studies and rational decision making to train students to examine social problems critically and systematically (Ginanjar, 2017). This social studies learning tradition refers more to efforts to improve students' higher-level thinking skills in the form of critical and systematic thinking and also seeks to improve inquiry skills in the form of seeking and finding knowledge to solve problems faced in learning activities.

The results of the above research as explained in the results of previous research conducted by Hayatun rahmi (2017) which states that the limitations of teachers in the application of learning models that vary with the material can cause boredom of students in learning and make students less creative in learning the material taught, therefore teachers need to apply project-based learning to hone the creative thinking skills of students. So it can be analyzed that through PJBL-based social studies learning, meaningful learning objectives are achieved because the knowledge and skills gained are the result of students' own thinking and are implemented by students as well in exercising their creative thinking skills. Learning theory that supports the tradition of social studies as reflective inquiry built through project-based learning in this study is the learning theory of constructivism. This is because according to the view of cotructivism learning theory that knowledge is built by humans little by little whose results are expanded through a limited context and not suddenly. Humans must construct that knowledge and give meaning through real experiences (Thobroni, 2015). So it can be understood that the theory of constructivism is a learning theory where during learning activities takes place to provide activeness and train independence to students to learn to find their own competencies, knowledge and other things needed to develop themselves. Meanwhile, the teacher is positioned as a facilitator who guides the course of learning activities so that learning objectives are achieved optimally.

The first aspect, namely the fluency aspect (fluent thinking skills) which consists of 4 indicators, the indicator of quickly seeing errors from objects and a fluent indicator in thinking about ideas for making projects obtained the highest percentage, meaning that these two indicators were classified as very creative categories with a percentage of 82.5%, while the indicator works well and the fluent indicator in working on products with excellent time provisions obtained a percentage of 75% with the creative category. The second aspect is the flexybility aspect, consisting of three indicators, namely the first indicator provides a variety of appropriate uses of materials for the product with a percentage of 62.5%, the second indicator thinks of different ways to complete the product with a percentage of 70%, and the third indicator designs the product in different ways with a percentage of 75%. These three indicators have not all students performed the assessed indicators, so that the criteria are quite creative, the originality aspect (original thinking skills) consists of three indicators, the first indicator is thinking of things that have never been thought of by others obtained a percentage of 57.5% with less creative criteria, The fourth aspect is the elaboration aspect

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

which consists of two indicators, the most dominant indicator in this aspect is the indicator of making interesting and creative TikTok videos related to the project that has been used with a percentage of 87.5% in very creative criteria. This is because during the learning process, some of the students were able to adjust the process of making TikTok videos with the projects they were working on, showing the suitability between the images, sounds and projects they did starting from the planning, creation and implementation stages of the project. evaluation aspect (evaluation thinking skills) consists of three indicators. The indicator of considering its own point of view obtained quite good results with a percentage of 70%, while the other two indicators, namely the indicator of determining opinions and sticking to them and being able to make decisions on open situations, obtained 75% results in the creative category. By using social media, the TikTok application can play an important role in improving students' creative thinking skills. The platform provides a fun and easy way to consume content, and its short format makes it perfect for learners by watching educational TikTok, learners can get quick and digestible chunks of information that can help in their studies.

These contents will not only help improve creative thinking skills, but can also provide a fun and interactive learning experience for users. TikTok can also be used as a tool for collaborative learning. Learners can share videos, comment and give feedback to each other. This opens up opportunities for deeper discussion and reflection on learning topics. In addition, TikTok can also be used as a platform to conduct collaborative projects, where learners work together in groups to create videos that incorporate their ideas.

In using TikTok as a learning medium, learners will also develop digital skills that are important in today's digital era. They will learn about media production, video editing, and better media literacy. These skills will be useful in an increasingly connected and technology-dependent world. TikTok can be an effective learning tool with the potential to increase learner engagement, facilitate collaborative learning, and develop digital skills by utilizing its creative features and accessibility, TikTok can enrich the learning experience and help learners understand complex concepts in an engaging way however, the use of TikTok in education should be done wisely and in the right learning context.

TikTok social media as a form of audio-visual social media contains short videos accompanied by music (Tri Buana and Dewi Maharani, 2020). The use of TikTok media in improving students' creative thinking skills has been proven through various studies such as those conducted (Devi, 2022) which prove that the use of TikTok media makes it easier for educators to develop students' learning creativity. Likewise, research conducted (Rahmana, 2022) resulted in the conclusion that TikTok media is effectively used in learning to develop students' learning creativity. Based on the two research results, this research was developed by collaborating between the project-based learning model and TikTok media.

Social media as interactive content such as research conducted by muthi, safitri, and sujarwo. (2024) social media is not only a source of inspiration but also a tool to increase creativity in the teaching process. In addition, the existence of educational content on social media also encourages prospective teachers to create their own educational content. However, careful preparation and strategy are needed so that the content is effective in delivering learning materials to the audience.

Learning using TikTok social media based on project-based learning has the benefit of increasing students' enthusiasm for learning. This is as a result of previous research by Fatimah, hasanuddin and amin (2021) stating that the use of the TikTok application in the

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

learning process makes students more enthusiastic and comfortable following learning to demonstrate drama texts. Most students are familiar with the TikTok application and have created content with this application. Students feel happy and enthusiastic about learning. The content that usually appears in the TikTok application owned by students is very diverse, ranging from learning, entertainment and shopping.

Conclusion

Based on the results of research and discussion, learning using the TikTok application with a project-based learning model in learning the dynamics of the lithosphere in the volcanism sub chapter, it can be concluded that the creative thinking skills of students during the learning process using the TikTok application based on the project-based learning model on geography material in the volcanism sub chapter are classified as creative with a percentage of 71.67%. That the social media most favored by the millennial generation is TikTok. TikTok social media has the attraction of displaying diverse video content, short duration and accompanied by music. This attracts the attention of students with the various content provided, one of which is educational content that is able to provide an understanding of the material explained in a concise manner. TikTok can be utilized as a learning media for both educators and students by adjusting teaching materials and characteristics of students so as to create an interactive and fun learning environment.

References

Andiyana, M.A., Maya, R., & Hidayat, W. (2018). Analysis of mathematical creative thinking ability of junior high school students on the material of building space. JPMI (Journal of Innovative Mathematics Learning), 1 (3), 239-248.

Birgili, B. (2015). Creative and critical thinking skills in a problem-based learning environment. Journal of Gifted and Creativity Education, 2 (2), 71-80.

Cooper, D., & Higgins, S. (2015). The effectiveness of online instructional videos in the acquisition and demonstration of cognitive, affective and psychomotor rehabilitation skills. *British journal of educational technology*, *46*(4), 768-779. https://doi.org/10.1111/bjet.12166

Darwanto, D. (2019). Mathematical Creative Thinking Ability: (Definition and Indicators). Exponent, 9 (2), 20-26.

Ministry of Education. (2003). Law No. 20 of 2003. Law of the Republic of Indonesia Number 20 of 2003 Concerning the National Education System By the Grace of God Almighty President of the Republic of Indonesia.

Dewi, M. D., & Izzati, N. (2020). Development of interactive powerpoint learning media based on rme algebra class vii smp material. Delta: Scientific Journal of Mathematics Education, 8(2), 217.

Faturrahman, Muhammad. (2016). Innovative Learning Models. Yogyakarta: Ar-Ruzz Media

Hawadi, Reni Akbar. 2008. Different Talents of Girls and Boys. Online http://puskat.psikologi.ui.edu/index2.php?option=com_content&do_pdf=1&id=23 Accessed November 13, 2008.

Jailani, J., Retnawati, H., Wulandari, NF, & Djidu, H. (2020). Development of mathematical literacy skills based on content, context, and process. Problematics of 21st Century Education, 78 (1), 80.

Januari 2025. Vol. 10 No. 1
E-ISSN: 2656-1417
P-ISSN: 2503-0602
pp. 18-29

Jung, H., & Zhou, Q. 2019. "Belajar dan Berbagi Keterampilan Kreatif dengan Video Pendek: Studi Kasus Perilaku Pengguna di TikTok dan Bilibili", Asosiasi Internasional Masyarakat Riset Desain, Manchester.

Koumi, J. (2015). Learning outcomes achieved through self-assessed and segmented video-print combinations. Cogent Education.

Lukitoyo, P. S., Pratiwi, D., Pandiangan, M., Siregar, A. R., & Nababan, E. S. B. (2024). Perceptions of Medan State University History Education Students on the Use of TikTok Application as a History Learning Media. Innovative: Journal of Social Science Research, 4(3), 5665-5676.

Muhammad, RW, Hamid, ASA, Thobroni, AR, & Hussin, N. (2015). Challenges in the enforcement of Syariah Criminal Law in Selangor: Between perception and reality. Pertanika Journal of Social Science & Humanities, 23, 31-42.

Muthi, A.Z., Safitri, D., & Sujarwo, S. (2024). The Role of Social Media as a Means of Increasing the Creativity of Prospective Ips Teachers in Developing Interesting Learning. Sindoro: Cendikia Pendidikan, 3 (11), 1-11.

Puspitasari, L. (2012). The effect of problem-based learning model on students' creative thinking ability in biology class x senior high school 2 Surakarta in 2011/2012.

Rahmi, H. (2017). Application of Project Based Learning Model to Improve Students' Creativity in Various Occupations Theme at MIN Mesjid Raya Banda Aceh (Doctoral Dissertation, UIN Ar-Raniry Banda Aceh).

Risma Margaretha, S., Albet Maydiantoro, A., Onojah Amos, O., Dwi Yulianti, Y., Suparman, A., Basri, M., ... & Suroto, S. (2022). Reasoning model and moral simulation to improve students' social skills: A focused look at emotional intelligence. *Journal of Educational and Social Research*, *12*(1), 335-345.

Siswono, T. Y. E, (2008) Mathematics Learning Model Based on Submission and Problem Solving to Improve Creative Thinking Ability, Surabaya: Unesa Press.

Taubah, M., & Hadi, M. N. (2020). Tik Tok application as a medium for learning maharah kalam. Mu'allim Journal, 2(1), 57-65.