

The Use of Capcut Application in Improving Students' Creativity in Social Studies Learning at Junior High School

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Abstract: According to 21st Century Skills, creativity is one of the competencies needed in all aspects of life. In addition, the 21st century requires all aspects to be based on technology, especially in education. However, in reality students' creativity skills are still low and the use of technology is still limited. Based on this problem, the purpose of a research in this paper is to describe of students' creativity skills after using an application Capcut. This research design is classroom action research (CAR). This research result that there was an increase in each cycle. The observation results of the students' creativity in the first cycle got a percentage 50% which means quite good category, in the second cycle got a percentage 75% which means good category, and in third cycle got a percentage 95% which means good category. Based on this research, it was found that the use of Capcut application can improve students' creativity skills in social studies learning.

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Introduction

As the progresses era , the education system continues to develop quickly to adapt to the transition of technological developments. According to Pasal 3 Undang-Undang Dasar No. 20 Tahun 2003 concerning Sistem Pendidikan Nasional, the purpose of education is to produce a generation that has quality potential. One of the aspects contained in the Sistem Pendidikan Nasional is to form creative students. But in reality, one of the attitudes of Indonesian citizens' creativity is currently proven to be declining. Based on Global Creativity Index/GCI (2015) states that Indonesia occupies a low creative level compared to other countries. Out of 139 countries, Indonesia ranks 115th. In response to this problem, Kemendikbudristek implemented the Kurikulum Merdeka program in schools. In the Kurikulum Merdeka, teachers are required to train students to have aspects contained in the Profil Pelajar Pancasila. In the Profil Pelajar Pancasila there are six aspects, namely: (1) Faith, Piety, God Almighty, and Noble Morals; (2) Global Diversity; (3) Cooperation; (4) Independent; (5) Creative; (6) Critical Thinking. In the Kurikulum Merdeka, teaching and learning activities in class are integrated into project-based learning in an effort to increase student creativity. With implementation project-based learning can encourage students to make an innovation and implementation in the application of technology in learning activities. In project-based learning there are several aspects including: (1) project planning; (2) project implementation; (3) guided inquiry and product creation; (4) project conclusion. These aspects are complementary to each other in project-based learning (Anggraeni et al., 2019)

In the 21st century, the challenges that will be faced are definitely in the transition of innovation and technology. This challenge will be difficult if it cannot change the way of

educating and teaching and learning. Apart from relying on knowledge, the 21st century relies on skills as a quality that every society has. One of the skills that must be improved is creativity skills. According to Trilling and Fadel (2009) stated that the skills needed in the 21st century are creativity and innovation skills. Creativity and innovation skills are needed to create new products that are of value to global economic life. In addition, empowering creativity and innovation skills is closely related to the use of modern technology (Trilling & Fadel, 2009). The rise of jobs that depend on the use of technology requires someone to be able to operate technology and have creative skills. Examples of jobs that require creativity skills is design creator, vlogger/content creator, copywriter, etc.

According to Suratno (2005) that creativity is a creative act that uses the intelligence of imagination to make things or solve problems. Creativity arises from problems derived from five kinds of creative actions, including: 1) Fluency, indicates expressing similar ideas to solve problems; 2) Flexibility is the ability to get ideas to find solutions to problems; 3) Originality, refers to the ability to express unique or extraordinary responses; 4) Elaboration, indicates the ability to express directing ideas in a straightforward manner to make ideas become reality; 5) Sensitivity, indicates sensitivity to viewing problems as a response to a phenomenon (Septikasari & Frasandy, 2020). According to Dietrich (2018) creativity is the fountainhead of our civilizations and a defining characteristic of what makes us human. Creativity in opinion Makmur (2015) is a process that requires balance and application of three important components namely analytical intelligence, creative and practical. In addition, creatives are people who involve themselves in the creative process, getting encouragement from the people around them who create creative products. According to Makmur (2015) a person has creative talents including: (1) the desire of students to carry out creative actions and plans after careful consideration; (2) Confident and creative in finding and investigating something in learning; (3) Active and dedicated in carrying out tasks, responding to questions, and tending to provide more answers; (4) Ability to make synthesis and analysis (Supriatna & Maulidah, 2020)

According to Guilford (1967) states that there are important aspects of creative thinking, namely: (1) Fluency of thinking, the ability to generate new ideas quickly. Fluency of thinking emphasizes quantity over quality; (2) Flexibility of thinking, the ability to use different approaches to thinking, to look at problems from different points of view, and to get various answers to questions. Flexibility of thinking is a characteristic of creative people; (3) Elaboration of thoughts, the ability to develop new ideas, add elements, and detail situations or objects so that they become more interesting; (4) Original thinking, the ability to generate new ideas. Being creative is not always about creating new things, but it can also involve innovating things that are available. Creativity and innovation skills are the most important skills in the demands of the 21st century. Honing students' high curiosity, self-confidence, creating new ideas, being open and responsive to other opinions, learning from failure, and contributing and innovating can improve creativity and innovation skills students.

According to Mayr (1981) says that there are three types of creativity, namely: (1) neuroanatomy, (2) processes (cognitive, computational, and physiological), (3) evolutionary algorithms (EAs). The three types are different and have levels from each other, but all three have a systematic relationship between one another. According to Tan (2009) suggests that creativity is formed from four aspects including: (1) The affective-motivational; (2) Systematic-strategic thinking; (3) Analytical-inferential thinking; (4) Divergent thinking. Providing good stimulus in cognitive aspects, a conducive environment, creative teachers, and the role of parents can influence the creation of creative habits in children both in the category *neuroanatomy* children, the process of formation, and the final results. With good guidance

and direction, children will always get used to doing positive activities and slowly aspects of children's creative skills will be honed by themselves.

Technology-based in learning is known as TPACK (Technological Pedagogical Content Knowledge) is a unity in comprehensive knowledge and skills in terms of material and pedagogy that are united in technological developments. TPACK is considered a new approach for teachers using technology to solve problems. All professional teachers must have TPACK competencies, which include pedagogic skills, social skills, professional skills, and personality skills. TPACK can be used in social studies learning to combine social studies content, technology, and teaching approaches in schools (Suyamto et al., 2020). TPACK can be used in social studies learning to combine social studies content, technology, and teaching approaches in schools. TPACK integrates complex technology in learning by paying attention to the three main learning components namely pedagogy, content, and technology itself. All of this is needed by teachers to develop effective learning (Mutiani et al., 2021). The term learning refers to pro-active action in the educational process, because in it not only the teacher is active, but students also participate in the learning process (Akbar & Komarudin, 2018). All students must have digital literacy skills, where digital literacy is a skill that must be possessed in the 21st century (Saripudin et al., 2023). In schools, learning media is used to improve the quality of education. According to Mahnun (2012) to use instructional media effectively, teachers must seek, find, and choose media that meet students' learning needs, attract students' attention, according to their maturity and experience, and according to the characteristics of students in the class. These factors include the maturity of the child and the context of his experience, as well as the mental state associated with the student's developmental age. Meanwhile according to (Rusman et al., 2012) indicates that learning media is message technology used in direct learning and is intended to convey subject matter. Learning media can be in the form of audio-visual and print media that come from hardware technology. The use of learning media can increase student involvement in the learning process and can also increase student knowledge (Abdulkarim et al., 2018).

Social studies learning is one of the subjects in schools that teaches about 5 aspects of creative behavior. Social studies lessons at school are considered to influence students' creative abilities. This is due to the fact that social studies learning aims to increase knowledge and skills that are relevant to the abilities needed in the 21st century. Through social studies learning, students can improve their creative abilities by involving phenomena and new concepts in finding solutions. According to Sapriya (2011) Social studies education is a subject at the elementary and secondary school level which is integrated from various subjects. The goal is to make subjects more meaningful to students. Therefore, the subject matter is structured in a way that suits the students' environment, their characteristics, and their needs. Therefore, student-oriented approaches have developed, such as student-centered approaches, integrated approaches, social problem-centered approaches, broad field approaches, and so on. the main goal of social studies in schools is to educate students as knowledgeable citizens (knowledge), Skills, attitudes and values usable tools that can be used to solve personal or social problems, make decisions, and participate in social activities. Social studies learning students are taught five social studies teaching perspectives including: (1) inheritance of citizenship values(citizenship transmission); (2) education in social sciences; (3) reflective way of thinking (reflective inquiry); (4) student personal development; (5) rational decision making (Effendi, 2018). In addition, students are prepared to face development challenges and Indonesia's potential to become a developed country. At school, social studies subjects are considered to have the impression of being subjects that need to be memorized according to students. Changing learning methods and using actual supporting media to prevent students from getting bored is one way to increase students' motivation in

social studies learning. In addition, currently teachers are required to apply technology in learning in schools as *21st Century Educator* and give birth to generations who have 21st century skills.

One effort that can be done is to use the *Capcut* application in learning. *Capcut* application is application for video editor to create interactive learning videos. In addition, *Capcut* application is widely downloaded by many people (Republika.co.id, 2023). *Capcut* application considered very suitable for those who want interesting videos but free of charge (Safitri & Jamilah, 2021). This application can be made using an Android cellphone and it contains tools which are diverse and easy to use, so this application is widely used by all groups, including junior high school students. *Capcut* application can support students to improve their creativity skills and create their work according to the demands of skills in the 21st century. Based on the problems, the research in this article examines the use of the *Capcut* application in improving students' creative skills in social studies learning at SMP Negeri 7 Bandung using a Classroom Action Research (CAR) research design.

Research Method

The research design was designed as Classroom Action Research (CAR). Efforts to improve learning outcomes throughout the cycle start from determining the focus of the problem, planning and implementing actions, observing and collecting data, reflection (analysis and interpretation), and planning further actions. Classroom Action Research is a type of research that combines substantive action methods carried out by someone to understand the phenomena that occur and contribute to the process of improvement and change (Asrori & Rusman, 2020). This research was conducted in 3 cycles using the Kemmis and McTaggart models. The data collection technique used was an observation sheet on student creativity performance and an assessment of the results students' video work using the *Capcut* application. The student observation grid can be described in the table below:

Table 1. Student Observation Grid

ASPECT	INDICATOR	SUB INDICATOR
Creativity	Fluency	a. Developing ideas and ideas b. Finish the video on time
	Flexibility	a. Create meaningful video content b. Provides video editing features
	Originality	a. Produce videos without copying b. Producing new and unique works
	Elaboration	a. Detailing the contents of the video content b. The purpose of conveying information is conveyed
Video <i>Capcut</i>	Video creation	Theme Suitability Interactive Videos Video Duration Suitability Aesthetics / Beauty

Table 2. Observation Assessment Categorization

Percentage	Category
70,83% - 100%	Good (B)

37,50% - 64%	Quite Good (C)
4,67% - 33,30%	Less (K)

The procedures for carrying out this classroom action research include planning, action, observing, and reflecting. This research was conducted at SMP Negeri 7 Bandung. The subject of this study was class VIII-G which had 34 students, consisting of 14 male students and 20 female students. The indicators of the success of the action being said to be successful are as follows: 1) There is an increase in aspects of activity and participation of students in the learning process; 2) There is an increase in the aspect of creativity marked by an increase in students' creative skills towards students' projects. The success or completeness of learning is seen based on the results of teacher observations through the work of students.

Result and Discussion

Description of Social Studies Learning Using the *Capcut* application with Classroom Action Research

Cycle 1

Implementation of cycle 1 applies direct learning in class. The material studied is tema 02 point A sub-tema "Pemanfaatan Lingkungan & Perdagangan AntarPulau". The learning process is done with a model project based learning where students will make a project in the form of a video about "Potensi SDA di Indonesia" using a *Capcut* application which refers to several aspects including: (1) project planning; (2) project launch; (3) guided inquiry and product creation; (4) project conclusion. During learning process, students look still passive. The teacher has given a clear explanation regarding the *Capcut* application, but there are still students who do not understand the usefulness of the application. During the process of working on the project, students are still not able to organize the division of tasks properly, so they still rely on just one or two people in their members. In addition, there are network constraints that hinder the video processing process. At the end of the lesson, the results of the video work are collected via *Google Drive* which has been provided by the teacher.

The following is an explanation regarding the performance evaluation indicators and student creativity in making *Capcut* videos. Researchers categorize indicators as good, quite good, and less. Based on the results of the data that has been obtained from observations in cycle 1, it shows that the creativity performance of students obtains an average percentage of 50% and is in the quite good category. While the observation results of the *Capcut* video assessment obtained an average percentage of 50% and were in the quite good category.

Cycle 2

In the implementation of cycle 2 still apply the model project based learning like cycle 1, but in cycle 2 it tries to correct the deficiencies that occurred in cycle 1. The material to be studied is tema 03 point A with the sub-tema "Perubahan Masyarakat Akibat Penjajahan Bangsa Barat, Pendudukan Jepang dan Organisasi Pergerakan Nasional". Then students are directed to work on the *Capcut* video project with the theme "Organisasi Pergerakan Nasional". At this meeting students have started to actively ask questions or express their opinions compared to the previous meeting where students tended to be passive when asked or asked to express opinions. Students are able to make *Capcut* videos by using the features but the information contained in the video is still not effective and efficient.

Based on the results of the data that have been obtained from observations in cycle 2, there is an increase. In cycle 2 it shows that the student's creativity performance has increased from 50% to 75% and is in the good category. This indicates an increase of 25%. While the observation results of the *Capcut* video assessment in cycle 2 obtained an increase from 50% to 70% and were in the good category, with an increase between cycle 1 and cycle 2 of 25%.

Cycle 3

In the implementation of cycle 3 still apply the model project based learning like cycle 1 and cycle 2, but in cycle 2 there are still deficiencies so that in cycle 3 it tries to correct the deficiencies that occurred in cycle 2. The material studied is tema 03 point B with the subtema "Proses Pelaksanaan Kemerdekaan". Then students are directed to work on the *Capcut* video project with the theme "Timeline Pelaksanaan Kemerdekaan Indonesia". In cycle 3 there was an improvement from before, where students were able to make *Capcut* videos by containing clear and effective information, has included supporting photo illustrations so that the video becomes more interactive.

Based on the results of the data that have been obtained from observations in cycle 3, there is an increase. In cycle 3 this shows that the creativity performance of students has increased from 75% to 95% and is in the good category. This indicates that between cycles 2 and 3 there has been an increase of 20%. While the observation results of the *Capcut* video assessment in cycle 3 obtained an increase from 75% to 89% and were in the good category, with an increase between cycle 2 and cycle 3 of 14%.

Description of Students' Creativity Skills After Using *Capcut* Application in Social Studies Learning

Based on the results of the actions that have been carried out in three cycles, there are results of increasing students' creativity skills by using the *Capcut* application on social studies learning at SMP Negeri 7 Bandung. This can be seen in the results of the observation sheet of students' creativity performance and the assessment of students' video results in making videos using *Capcut* application. The presentation of the results of the percentage increase in students' creativity skills is as follows:

Table 3. Increasing Student Creativity Cycle 1-3

Observation Aspect	Cycle 1	Cycle 2	Cycle 3
Student Creativity Performance	50%	75%	95%
<i>Capcut</i> Video Work Results	50%	75%	89%
Category	Quite Good	Good	Good

Based on **Table 3**, it can be seen that there is an increase in the results of student creativity performance in each cycle. In cycle 1, students' creativity obtained an average percentage of 50%. Based on **Table 2**, this amount is included in the sufficient category or "C" and still needs to be increased again in the next cycle. On the assessment of the results of the *Capcut* videos obtain an average percentage of 50% which is included in the sufficient category or "C". It can be seen that several aspects are still lacking and need to be improved in the next cycle.

In cycle 2, based on **Table 3**, student creativity gets an average percentage of 75% which is included in the good or "B" category, but there are still several aspects that need to be improved such as providing features editing video, and detailing the contents of the video content. On the assessment of the results of the *Capcut* videos obtain an average percentage of 75% which is included in the good or "B" category, but in the results some aspects are still considered lacking such as interactive videos and aesthetics/beauty so they need to be improved again so that the results of the learning process are more optimal in the next cycle. From the results obtained between cycle 1 and cycle 2, the assessment of student creativity performance increased by 25%. While on the assessment of the results of the *Capcut* videos increased by 25%.

In cycle 3, based on **Table 3**, students' creativity obtained an average percentage of 95% which was included in the good or "B" category. From these results there was an improvement from the deficiencies that occurred in the previous cycle, seen in a better increase in every aspect of student creativity performance which affected improvement from before. On the assessment of the results of the *Capcut* videos obtain an average percentage of 89% which is included in the good or "B" category. There is an improvement in results of *Capcut* video students' who already contain aspects of assessment are better than the results of previous work. Students' are able to produce videos that contain appropriate themes, interactive videos, appropriate video durations, and aesthetics/beauty. From the results obtained between cycle 2 and cycle 3, the assessment of student creativity performance increased by 20%. While on the assessment of the results of the *Capcut* videos increased by 14%. The presentation of the results percentage increase in students' creativity skills is as follows

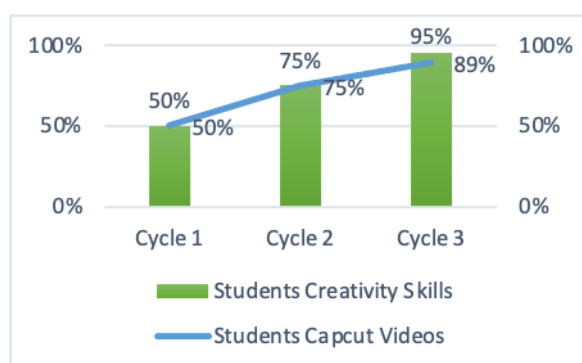


Figure 1. Improvement of Students' Creativity Skills

Increasing students' creativity skills in the form of using *Capcut* application in social studies learning is in line with the opinion Sapriya (2011) where social studies learning prepares students to master the knowledge, attitudes, and skills in order to become good citizens, which in this study focuses on increasing students' creative skills. This is also in line with the Kurikulum Merdeka program on the Profil Pancasila, one of which is the aspect of forming students with creative skills. The results of this study can be used as a contribution in supporting the development of Pancasila Profile values in students in the aspect of creativity. Based on the results of the increase obtained in each cycle and the student's response after giving the action, it can be concluded that the *Capcut* application considered to be able to assist students in improving student skills well in social studies learning. So it can be concluded that the use of the *Capcut* application can improve the creativity skills of VIII-G students in social studies learning at SMP Negeri 7 Bandung.

Discussion

Teacher designed to measure students' creativity skills activities referring to Guilford's (1967) theory regarding important aspects of creativity including (1) fluency in thinking (*fluency of thinking*); (2) flexibility of thinking (*flexibility*); (3) details (*elaboration*); (4) originality of thinking (*originality*). In this research, the teacher formulates these aspects into sub-indicators, namely developing ideas and ideas, completing videos on time, making video content meaningful, providing features *editing* video, producing videos without copying, producing new and unique work, detailing the content of the video content, and conveying the purpose of conveying the information. In line with Trilling and Fadel's (2009)

theory, efforts to improve creativity and innovation skills include creating new ideas/work, collaborating and being open to other people's opinions. In line with this theory, in the process of working on video projects *Capcut*, the teacher directs students to work in groups and collaborate with each other.

In line with the opinion of Suyamto et al (2020) regarding the TPACK concept (*Technological Pedagogical Content Knowledge*) where learning material in class is combined with technological developments. In this research, the teacher designed technology-based social studies learning by utilizing applications *video editor* form *Capcut* which is adapted to the social studies material in class. Therefore, it is in line with the opinion of Suyamto et al (2020) that teachers have designed TPACK-based learning in accordance with the demands of education in the 21st century. Teachers determine the application *Capcut* as learning media because it is in line with Mahnun's (2012) opinion that the use of learning media meets students' needs and attracts students' attention. Application *Capcut* it is considered very suitable for use by junior high school students because it is easy to operate and does not require costs. Students are also interested in the use of applications *Capcut* in social studies learning, this can make the learning atmosphere interesting.

Based on the results of this research, in line with the theory of Trilling and Fadel (2009) which states that students who have creativity skills are students who develop ideas, combine the information obtained into new work, and are able to collaborate with other people. The results of this research are in accordance with the opinion of Trilling and Fadel (2009) that during the learning process using applications *Capcut* students are able to channel their ideas by combining relevant material or information so that they can produce a work in the form of a video made with the application *Capcut*. Apart from that, the results of this research also show an increase in students' imagination abilities. Based on the results, it can be concluded that the use of the *Capcut* application can improve the creativity skills of VIII-G students in social studies learning.

Conclusion

The creativity skills of VIII-G students at SMP Negeri 7 Bandung can be improved by using the *Capcut* application. Action Research in class using a model project-based learning, where students create a video project using the *Capcut* application. As shown by the results of the average percentage of creativity performance which includes indicators of creativity, as well as an increase in the results of *Capcut* video students in each cycle showed an increase in student creativity. This research shows that learning in digital era requires teachers who are more proficient in using technology as a learning media, as well as being creative and innovative in providing meaningful learning for their students. In addition, students are required to be proficient in the use of technology so that they can adapt to the challenges faced in the modern technological era.

References

- Abdulkarim, A., Ratmaningsih, N., & Anggraini, D. N. (2018). Developing civicpedia as a civic education E-learning media to improve students' information literacy. *Journal of Social Studies Education Research*, 9(3), 45–61. <https://doi.org/10.17499/jsser.32139>
- Akbar, R. R. A., & Komarudin, K. (2018). Pengembangan Video Pembelajaran Matematika Berbantuan Media Sosial Instagram sebagai Alternatif Pembelajaran. *Desimal: Jurnal*

- Matematika*, 1(2), 209. <https://doi.org/10.24042/djm.v1i2.2343>
- Anggraeni, D., Festiyed, & Asrizal. (2019). Meta Analisis Pengaruh Model Pembelajaran Problem Based Learning Terhadap Kemampuan Berpikir Kritis. *Pillar of Physics Education*, 12(4), 881–888. <https://doi.org/10.19109/bioilmi.v8i1.12882>
- Asrori, & Rusman. (2020). *Classroom Action Research: Pengembangan Kompetensi Guru*. Purwokerto: CV. Pena Persada.
- Dietrich, A. (2018). Types of creativity. *Psychonomic Bulletin and Review*, 26(1), 1–12. <https://doi.org/10.3758/s13423-018-1517-7>
- Effendi, R. (2018). Perspektif Dan Tujuan Pendidikan IPS. *Universitas Pendidikan Indonesia*, 1–41.
- GCI. (2015). *Global Creativity Index*. [Online]. Diakses dari <http://chartsbin.com/view/41109>
- Guilford, J. . (1967). *Creativity Research: Past, Present and Future*. University Southern California.
- Mahnun, N. (2012). Media Pembelajaran (Kajian terhadap Langkah-Langkah Pemilihan Media dan Implementasinya dalam Pembelajaran). *Jurnal Pemikiran Islam*, 37(1), 27–35. <https://doi.org/10.4236/ce.2020.113020>
- Makmur, A. (2015). Efektivitas Penggunaan Metode Base Method dalam Meningkatkan Kreativitas dan Motivasi Belajar Matematika Siswa SMPN 10 Padangsidempuan. *Jurnal EduTech*, 1(1), 1–15.
- Mayr, E. (1981). *The Growth of Biological Thought: Diversity, Evolution and Inheritance*. Cambridge: Harvard University Press.
- Mutiani, M., Supriatna, N., Abbas, E. W., Rini, T. P. W., & Subiyakto, B. (2021). Technological, Pedagogical, Content Knowledge (TPACK): A Discursions in Learning Innovation on Social Studies. *The Innovation of Social Studies Journal*, 2(2), 135. <https://doi.org/10.20527/iis.v2i2.3073>
- Republika. (2023). Aplikasi Edit Video dengan Hasil Menakjubkan. [Online]. Diakses dari <https://mlipir.republika.co.id/posts/199511/link-download-Capcut-aplikasi-edit-video-mudah-dengan-hasil-menakjubkan>
- Rusman, Riyana, C., & Kurniawan, D. (2012). *Pembelajaran Berbasis Teknologi Informasi dan Komunikasi: Mengembangkan Profesionalitas Guru*. Rajawali Pers.
- Safitri, D., & Jamilah, F. (2021). *Pengembangan Media Video Pembelajaran Menganalisis Teks Prosedur Menggunakan Aplikasi Capcut Pada Kelas XI MAN 2 Yogyakarta*. Universitas PGRI Yogyakarta.
- Sapriya. (2011). *Pendidikan IPS Konsep dan Pembelajaran*. Bandung: Remaja Rosdakarya.
- Saripudin, D., Ratmaningsih, N., & Anggraini, D. N. (2023). The Development of Podcast Based Learning Media on Social Studies to Improve Students' Digital Literacy. *New Educational Review*, 71, 35–49. <https://doi.org/10.15804/tner.23.71.1.03>
- Septikasari, R., & Frasandy, N. (2020). Keterampilan 4C Abad 21 Dalam Pembelajaran Pendidikan Dasar. *Jurnal Tarbiyah Al Awlad*, 8, 107–117. <https://doi.org/10.1016/j.jacc.2020.04.015>
- Supriatna, N., & Maulidah, N. (2020). *Pedagogi Kreatif Menumbuhkan Kreativitas dalam Pembelajaran Sejarah dan IPS*. Remaja Rosdakarya.
- Suyamto, J., Masykuri, M., & Sarwanto, S. (2020). Analisis Kemampuan Tpack (Technolgical, Pedagogical, and Content, Knowledge) Guru Biologi Sma Dalam Menyusun Perangkat Pembelajaran Materi Sistem Peredaran Darah. *INKUIRI: Jurnal Pendidikan IPA*, 9(1), 44–53. <https://doi.org/10.20961/inkuiri.v9i1.41381>



- Tan, O.S. (2009). *Problem-Based Learning and Creativity*. Singapore: Congage Learning.
- Trilling, B., & Fadel, C. (2009). *21st Century Skills Learning for Life in Our Times*. San Francisco: Jossey-Bass A Wiley Imprint.