Use of RADEC Learning Model on Student's Creative Thinking Skills through Social Studies Learning in Elementary School

Brilian Sejatining Latif[1], Disman[2], Wahyu Sopandi[3], Atep Sujana[4]

[1,2,3,4] Pendidikan Dasar, Universitas Pendidikan Indonesia, Bandung, Indonesia

✉ briliansl17@upi.edu

Abstract. This research was motivated by the low creative thinking skills in students in social studies learning in grade VI at one of the elementary schools in Garut Regency. This is due to the lack of creative stimulus provided in the school environment, the lack of interactive teaching models, and the lack of time and opportunities for students to easily explore. This study aims to analyze the creative thinking skills of grade VI learners after using the RADEC learning model. This study involved 18 students in one of the elementary schools in Garut Regency. The research method used is qualitative descriptive. The data collection used is observation, tests, and documentation studies. Data processing techniques use the Miles and Huberman techniques. This study obtained findings that at the *read*, *answer*, and *create* stages of creative thinking skills of students can be said to have appeared, at the *discuss* and *explain* stages of creative thinking skills of students can be said to have not appeared.

Keywords: Creative Thinking, Learning Model, RADEC, Social Studies, Elementary School

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INTRODUCTION

Education in Indonesia has undergone a significant transformation in line with the demands of global development and technology in the 21st century. The presence of the 21st century is marked by the emergence of the Industrial Revolution 4.0 era, this century is known as the "industrial age" period and also the "Knowledge age," where all efforts to hone skills through habits and fulfillment of the needs of life in various aspects are based on knowledge (Rifa Hanifa Mardhiyah et al., 2021). In this context, elementary schools have a key role as the first foundation in shaping children's character and skills. In the midst of rapid change, it is important to look at how education in elementary schools can accommodate and develop skills that are relevant to the needs of the times. The 21st century demands a more dynamic educational paradigm, where children are not only trained to remember facts, but also equipped with 21st century skills. UNESCO has identified several skills that must be mastered in the era of globalization, including critical thinking and problem-solving skills, creativity and innovation, communication and collaboration, social and intercultural skills, and mastery of information (Aslamiah et al., 2021). The learning process in elementary schools needs to be designed to be able to stimulate children's critical and creative thinking from an early age. This will give them a solid foundation to face the complex challenges of the future. In the 21st Century, not only is knowledge key, but skills also play a significant role in the context of learning. Skills are considered an essential component that is necessary in various areas of life (Rifa Hanifa Mardhiyah et al., 2021).

One important aspect possessed by students is creative thinking skills. Creative thinking is one form of divergent thinking, divergent thinking is applied in various fields (Septiyani, 2022). Creative thinking skills are part of the higher-order thinking skills of the 21st century. Creative thinking is a stage of thinking that helps students have the ability to see problems from various points of view and generate many ideas by taking good and correct answers (Wulandari et al., 2019) Creative thinking skills help improve process skills and learning outcomes and teaching processes. Creative thinking skills are also useful in students' lives and answer problems encountered in life (Hagi & Mawardi, 2021).

Students are required to have higher-order thinking skills or advanced thinking skills, namely critical thinking skills, creative thinking skills, collaborative thinking skills, and creative communicative thinking skills (Hagi & Mawardi, 2021). In addition, creative thinking raises the

potential of self (hidden talent) that exists in humans so that they are able to do something (Septiyani, 2022). Thus, strengthening creative thinking skills at the elementary level not only produces a generation that is ready to face the future, but also forms individuals who are able to create creative and positive solutions for the progress of society in the 21st century era.

In the era of globalization and with the rapid development of technology, the world of work increasingly demands qualified individuals and individuals who have creative thinking skills (Rifa Hanifa Mardhiyah et al., 2021). Advances in science and technology are changing society's need for a workforce that is able to adapt quickly and generate new ideas. This can be interpreted as a period in which human life undergoes significant transformations, and its success in various ventures depends largely on the quality of human resources who are superior in knowledge and skills (Rifa Hanifa Mardhiyah et al., 2021).Therefore, the world of education should prepare students to be able to develop creative thinking skills from an early age. As children who are still in the developmental stage, students in elementary school certainly have high imagination power and tend to think creatively, because the elements contained in creative thinking according to Toorance are fluency, flexibility, originality, and elaboration (Fitri Amaliyah et al., 2022).

However, based on observations that have been made by researchers show that there are several problems experienced by students regarding creative thinking skills in elementary schools, these problems include students feeling afraid to express creative ideas, lack of creative stimulus in the environment around students, lack of use of varied learning models, lack of time and opportunity to explore, and lack of support and reinforcement from teachers.

This was reinforced by previous research which revealed that students' creative thinking skills were declared not optimal, this was obtained based on the results of pretests conducted and obtained numbers of 58.64 and was included in the poor category (Twiningsih & Retnawati, 2023). Other studies have revealed that students are rarely encouraged to develop their thinking skills, so as a result, children are only able to remember the information learned without understanding how the knowledge can be applied. The impact is also seen in students' daily lives, where they tend to be consumptive and have no understanding of how to create things (Arisanti et al., 2017).

If students in elementary school do not have creative thinking skills, the impact can be detrimental in various aspects of development. Without the ability to think creatively, learners may face difficulties in solving complex problems and facing challenges that develop in the era of the 21st century. They may tend to rely on conventional approaches to understanding information, which can stifle creativity and innovation. A lack of ability to think creatively can also hinder the development of learning independence, intrinsic motivation, and willingness to take risks in exploring new ideas. In an increasingly dynamic world of work, learners without creative thinking skills may struggle to compete and adapt, reducing their chances of success in careers and making positive contributions to society. Therefore, it is important for the education system in elementary schools to focus on developing creative thinking skills to ensure learners are prepared for the complexity of future demands, as the role of learners in learning depends largely on how teachers engage learners (Septiyani, 2022).

Social Science (IPS) learning in elementary schools has a crucial role in shaping creative thinking skills in students. Through social studies subjects, students are given the opportunity to understand the complexity of social, cultural, and historical relationships. Developing 21st century skills can be achieved through education, which can be achieved by utilizing social studies topics. Social science is the simplification or adaptation of the social sciences and humanities as well as the necessary human activities that are compiled and presented scientifically for educational purposes. Social studies subjects are taught at the primary and secondary education levels and the social studies curriculum serves as a tool to understand society and the consequences of the dynamics of science and technology (Aslamiah et al., 2021). An interactive and inclusive social studies learning process can stimulate students' critical and creative thinking. Through the exploration of concepts such as social interaction, historical change, or policy impact, students not only acquire factual knowledge but are also trained in looking at problems from multiple perspectives and developing innovative solutions. Thus, social studies learning in elementary schools can be an effective vehicle to build a foundation of creative thinking skills, help

students see the world in a broader way, and stimulate their ability to contribute creatively in society.

The importance of making various breakthroughs that must be made by a teacher to overcome various problems faced by students in the classroom. The role of teachers is very necessary, this is a major factor in increasing innovation and the ability to give birth to creative thinking (Fitri Amaliyah et al., 2022). One solution that can be done to overcome these problems is by using a learning model that suits the needs of students. A good learning model has a central role in stimulating students' creative thinking skills in the 21st century era. Various innovative learning models are created to help students master 21st century skills (communication, critical thinking and problem solving, collaboration and creative thinking), often referred to as the 4Cs, including communication, critical thinking and problem solving, collaboration and creative thinking (Kusumaningpuri & Fauziati, 2021). Teachers who support, facilitate, and encourage students' creative expression also play an important role in shaping confidence and exploratory spirit. Thus, through the application of effective learning models, education not only imparts knowledge, but also becomes a catalyst for the development of creative thinking skills essential for student success in this ever-changing world. One of the learning models that is believed to stimulate students' creative thinking skills is the RADEC (read, answer, discuss, explain, and create) learning model (Sopandi, 2021).

One of the learning models that can be used to develop students' creative thinking skills is the RADEC learning model. The RADEC (read, answer, discuss, explain, and create)learning model was first proposed by Sopandi (Rindiana et al., 2022). The RADEC learning model is a learning model that uses syntax as the name of the learning model itself, namely reading or reading, answering or replying, discussing or discussing, interpreting or explaining, creating or creating (Rindiana et al., 2022). This model integrates various learning strategies and provides space for students so that they can interact with the subject matter being taught through various levels of understanding according to the stages in the RADEC learning model. The RADEC learning model is also an alternative and innovative learning model based on the Indonesian education system, which requires students to understand various scientific concepts in a limited time(Rindiana et al., 2022).

The first stage is *reading*, this reading stage is carried out before learning takes place where this stage is carried out outside learning activities at school (Halim, 2022). Studentsalso carry out these activities at home independently, of course, with parental supervision. Before this stage is carried out, the teacher has first given some pre-learning questions about the material to be learned. The purpose of this stage is as an initial process to obtain information, and also as a preliminary activity for activities to be carried out next. The second stage is *answer*, this stage is a continuation of the previous stage, where students are asked to fill in pre-learning questions independently according to the understanding they know from the reading process. The goal is to find out which parts have or have not been understood by students, and are also useful to help increase students' interest in reading. It also stimulates students to find their own problems to be solved (Halim, 2022). The third stage is *discuss,* this stage is usually done when the learning process takes place in the classroom. Students are grouped heterogeneously, each group discusses answers to fill in pre-learning questions that have been given by the teacher so that they can be agreed upon jointly by them, both in their groups and by all students in the class. In this stage, the teacher motivates and ensures that students' understanding of the material is correct and correct. This stage confirms and ensures students master concepts through the stages of answering, discussing, and explaining (Halim, 2022). The fourth stage is *explain,* at this stage each group takes turns presenting the results of work based on what they have agreed to which is done in front of the class in turn. The purpose of this activity is to ensure whether students fully listen to the things conveyed by the presenter or not, then at this stage the teacher invites students to actively ask, answer, refute and add. This stage is an opportunity for teachers to explain if there are some things that are not understood by students (Sopandi, 2021). The last stage is *create*, this stage is related to the concept of material that has been learned in the previous stages, where teachers need to inspire about what works can be made by students that are adjusted to the material studied, then students are asked to agree on what work they will make, of course, by discussing what plans or

designs of ideas they will realize (Sopandi, 2021). With active involvement of students through the RADEC learning model, learning objectives will be achieved effectively and efficiently. Effective learning must involve students in important tasks and interact in the learning process because currently students are required to be able to build their own knowledge. Active involvement of students in learning activities will have an impact on improving learning outcomes (Halim, 2022). The advantages of the RADEC learning model include (1) teachers are able to design models so that the learning process becomes interesting, (2) students' critical thinking performance can be improved, (3) students' analytical skills read more, (4) group collaboration increases, and (5) grammar is easily captured by educators' understanding (Kusumaningpuri & Fauziati, 2021). Through the use of the RADEC learning model in the classroom, learners have the opportunity to develop their creative thinking skills. This model not only enriches learners' understanding of the subject matter, but also trains learners' skills. Teachers can create a learning environment that can provide space for students to be able to think creatively, involve themselves actively, and develop their potential (Sofyan, 2019). It is hoped that the use of the RADEC learning model (*read, answer, discuss, explain, and create*) can stimulate the creative thinking skills of grade VI students in social studies learning in elementary schools, so that they are ready to face challenges in the future.

METHOD

This study used qualitative descriptive method research design. This research involves a group of subjects who will take part in social studies learning using globalization material which is then given intervention using the RADEC learning model. The participants in this study were 18 grade VI students in one of the elementary schools located in Garut Regency. The participants consisted of 11 girls and 7 boys. The data collection techniques used are observation, tests and documentation studies. Observation instruments are arranged based on the implementation stages in the RADEC learning model. The data analysis carried out is: 1) grouping data based on type; 2) transcribe the data obtained; 3) describe and develop data into indicators to be studied; 4) Represent the findings in a written report. In this study, validation was carried out by involving parental supervision of students during the learning process carried out at home (Sholeh et al., 2023).

RESULTS

Based on the results of data analysis obtained from the implementation of social studies subject learning which was then given intervention using the RADEC learning model to grade VI students in one of the elementary schools located in Garut Regency, the results can be explained in the Figure 1.

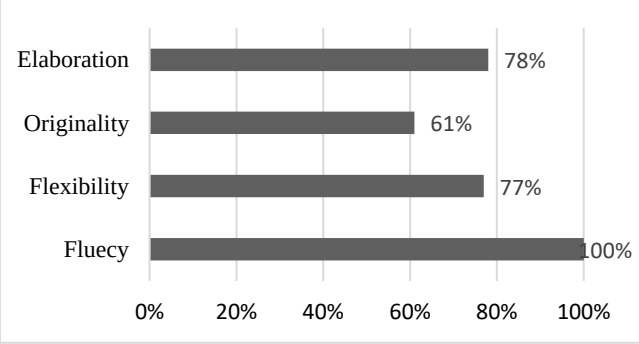


Figure 1. Creative Thinking Skills at the read stage

Creative thinking skills contained in the *reading* stage, namely in the first indicator for fluency of thinking, obtained a percentage of 100%, or about 18 people. At this stage students can be categorized as being able to read the text contained in the teaching materials provided by the teacher independently and smoothly without the help of others. This reading activity is very important and must be contained in the core learning process so that learning can be carried out more effectively and meaningfully (Primary et al., 2020). The second indicator of flexibility of thinking obtained a percentage of 78%, or about 14 people. At this stage, students can be categorized as being able to see the topic of discussion from various different points of view. The third indicator is about originality obtained a percentage of 61%, or about 11 people. At this stage, students can be categorized as being able to make questions and ideas that have not been thought of before by writing questions or things they don't know on the back of the pre-learning question answer sheet. The fourth indicator, which is about elaboration, obtained a percentage of 78%, or about 14 people. At this stage students do not just read the learning material provided by the teacher, but they look for additional information from other reading sources. It can be concluded that in the *reading* stage, students' creative thinking skills can be said to have appeared with an average percentage of the overall indicator of 79.25%.

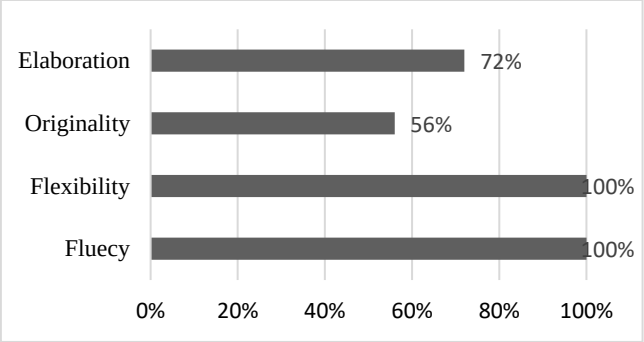


Figure 2. Creative Thinking Skills at the answer stage

Creative thinking skills found at the *answer* stage, namely in the first indicator for fluency of thinking, obtained a percentage of 89%, or about 16 people. Throughquestions teachers can monitor the competence of their students(Primary et al., 2020). Pre-learning questions given by teachers are used to stimulate students to understand the reading and concepts to be learned, so that students can provide simple explanations (Setyawan et al., 2023). At this stage, students can be categorized as being able to answer pre-learning questions clearly and well structured. The second indicator of flexibility of thinking, obtained a percentage of 100%, or about 18 people. At this stage students can be categorized as able to adjust their answers to the information that has been given before. The third indicator is about originality obtaining a percentage of 56%, or about 10 people. At this stage students can be categorized as being able to give unusual answers, they develop answers based on information obtained also on their own thoughts. The fourth indicator, elaboration, obtained a percentage of 72%, or about 13 people. At this stage students can be categorized as being able to provide in-depth explanations about the answers they work on pre-learning questions. It can be concluded that in the answer stage (answer) the ability to think creatively students can be said to have appeared with an average percentage of the overall indicator of 79.25%.

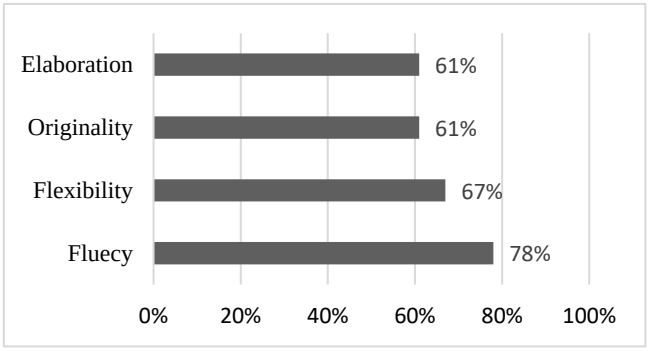


Figure 3. Creative Thinking Skills at the discuss stage

Creative thinking skills found at the *discuss* stage, students are accustomed to digging information from various sources they find independently, increasing interest in reading and assisting teachers in identifying various different student needs (Kelana et al., 2022). There is the first indicator for fluency of thinking obtained a percentage of 78% or about 14 people. At this stage, students can be categorized as actively participating during learning, both discussions in their groups and in class discussions. The second indicator of flexibility of thinking obtained a percentage of 67%, or about 12 people. At this stage students can be categorized as being able to respond to opinions or arguments given by other friends. The third indicator, regarding originality, obtained a percentage of 61%, or about 11 people. At this stage, students can be categorized as having begun to dare to make questions and answer questions that encourage original thinking from other friends. The fourth indicator, regarding elaboration, obtained a percentage of 61%, or about 11 people. At this stage students can be categorized as being able to create topics that are being discussed with a wider context. It can be concluded that in the *discussion* stage, students' creative thinking skills can be said to have not emerged with an average percentage of overall indicators of 66.75%.

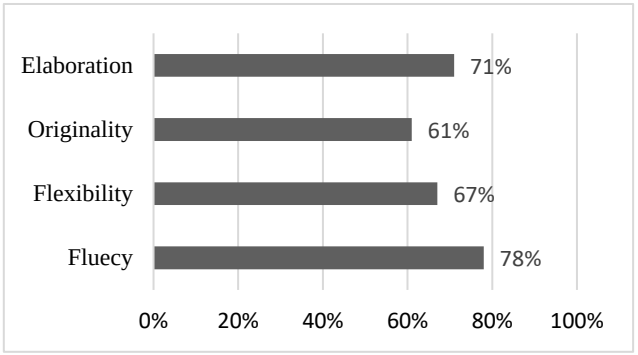
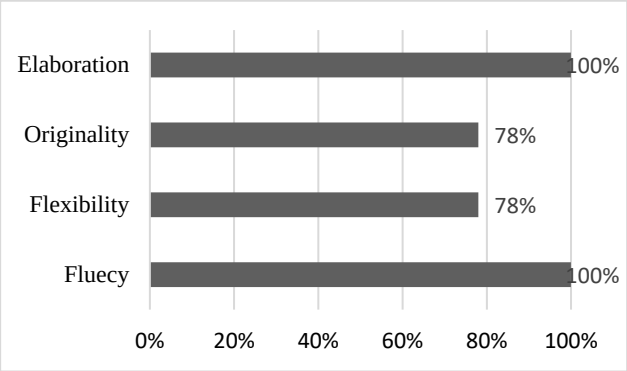


Figure 4. Creative Thinking Skills at the explain stage

Creative thinking skills found at the *explain* stage (present) that require communication should be an integral part of innovative learning(Rindiana et al., 2022). there is the first indicator of fluency of thinking which obtained a percentage of 78%, or about 14 people. At this stage students can be categorized as being able to explain concepts or ideas smoothly, without stammering so that they can communicate information clearly. The second indicator is about flexibility of thinking, obtaining a percentage of 67%, or about 12 people. At this stage students can be categorized as being able to explain concepts from various points of view. The third indicator, regarding originality, obtained a percentage of 61%, or about 11 people. At this stage students can be categorized as being able to provide a unique point of view regarding the material being discussed. The fourth indicator, elaboration, obtained a percentage of 72%, or about 13 people. At this stage students can be categorized as already able to use concrete examples, or

relevant illustrations to support their explanations. It can be concluded that in the explain stage (present) the ability to think creatively students can be said to have not appeared with an average acquisition of the overall percentage of indicators of 69.50%.

Figure 5. Creative Thinking Skills at the create stage



Creative thinking skills contained in the *create* stage, theactivity in this stage is to develop students' creative ideas in product making activities. The manufacture of these products is not limited by the teacher, in the sense that the teacher frees students to realize their creative ideas in a work (Tulljanah & Amini, 2021). Through exciting challenges and activities in project creation, students can develop the ability to operate and understand concepts from a knowledge (Umam &; Jiddiyyah, 2020). Pthere is the first indicator for fluency of thinking obtained a percentage of 100%, or about 18 people. At this stage students can be categorized as being able to plan and implement projects that their group will make smoothly and structured. The second indicator is about flexibility of thinking, obtaining a percentage of 78%, or about 14 people. At this stage, students can be categorized as being able to produce various alternative ideas in creating their work. The idea is certainly not the idea suggested by the teacher before, but there are some ideas from his own thoughts. The third indicator, regarding originality, obtained a percentage of 78%, or about 14 people. At this stage students can be categorized as having begun to show courage to try original ideas or the results of their own thoughts and not fixated on existing works both on the internet and others. The fourth indicator, which is about elaboration, obtained a percentage of 100%, or about 18 people. At this stage, students can be categorized as being able to string together deep sentences about the creative process, the concept to be conveyed, or the meaning contained in the work so that they are able to explain their work well in turn. It can be concluded that in the stage of *creating* creative thinking skills students can be said to have appeared with an average percentage of all indicators of 89.00%.

The implications of the RADEC model in the classroom are not necessarily used, it aims to bring out creative thinking skills. The active role of students in the classroom adds to the meaningfulness of the learning process (Nurnaningsih et al., 2023) . High student creativity will create better ideas in the form of a coalition of information, previous knowledge, and experience during student activities at school, family environment, or community (Sidabutar, 2021).

CONCLUSION

Based on the results of research and presentations that have been put forward, it shows that the RADEC learning model can be used as an alternative to help develop the creative thinking skills of grade VI students at the elementary school level in social studies learning. Creative thinking skills in social studies learning for grade VI students can be said to have appeared at the *read* stage, this is found based on the average results of each indicator at this stage obtained a percentage of 79.25% or entered into the category of quite good. Creative thinking skills in social studies learning for grade VI students in the first stage, namely *answers*, can be said to have appeared by obtaining an average percentage of each indicator of 79.25% or entering the category of quite good. Creative thinking skills in social studies learning of grade VI students at the *discuss* stage can be said to have not appeared because the average percentage of each indicator is 67.75% or falls

into the category of not good. Creative thinking skills in social studies learning of students at the *explain* stage can be said to have not appeared because the average percentage of each indicator is 69.50% or falls into the category of not good. Creative thinking skills in social studies learning of grade VI students at the *create* stage can be said to have emerged by obtaining an average percentage of each indicator of 89.00% or entering the good category. With these results, it can be concluded that the RADEC learning model can be used as an alternative that can be used to develop students' creative thinking skills in social studies learning in elementary schools.

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REFERENCES

Arisanti, W. O. L., Sopandi, W., & Widodo, A. (2017). ANALISIS PENGUASAAN KONSEP DAN KETERAMPILAN BERPIKIR KREATIF SISWA SD MELALUI PROJECT BASED LEARNING. *EduHumaniora | Jurnal Pendidikan Dasar Kampus Cibiru*, *8*(1). https://doi.org/10.17509/eh.v8i1.5125

Aslamiah, A., Abbas, E. W., & Mutiani, M. (2021). 21st-Century Skills and Social Studies Education. *The Innovation of Social Studies Journal*, *2*(2). https://doi.org/10.20527/iis.v2i2.3066

Fitri Amaliyah, Sudarti, S., & Rif'ati Dina Handayani. (2022). Analisis Deskriptif Keterampilan Berpikir Kreatif Siswa SMP tentang Lapisan Bumi, Mitigasi Bencana, dan Global Warming. *JURNAL PENDIDIKAN MIPA*, *12*(2). https://doi.org/10.37630/jpm.v12i2.595

Hagi, N. A., & Mawardi, M. (2021). Model Problem Based Learning untuk Meningkatkan Keterampilan Berpikir Kreatif Siswa Sekolah Dasar. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, *3*(2). https://doi.org/10.31004/edukatif.v3i2.325

Halim, A. (2022). PENGARUH MODEL READ ANSWER DISCUSSION EXPLAIN AND CREATE (RADEC) PADA PEMBELAJARAN TEMATIK TERHADAP HASIL BELAJAR SISWA DIMODERASI MOTIVASI BELAJAR. *SOSIOEDUKASI : JURNAL ILMIAH ILMU PENDIDIKAN DAN SOSIAL*, *11*(1). https://doi.org/10.36526/sosioedukasi.v11i1.1950

Kelana, J. B., Wahyu Sopandi, Anugrah Ramadhan Firdaus, Yusup Maulana, Linda Hania Fasha, & Ida Fiteriani. (2022). KEMAMPUAN GURU SEKOLAH DASAR DALAM MEMBUAT PERTANYAAN PRA PEMBELAJARAN MENGGUNAKAN MODEL RADEC. *Jurnal Cakrawala Pendas*, *8*(4). https://doi.org/10.31949/jcp.v8i4.2688

Kusumaningpuri, A. R., & Fauziati, E. (2021). Model Pembelajaran RADEC dalam Perspektif Filsafat Konstruktivisme Vygotsky. *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar*, *3*(2). https://doi.org/10.36232/jurnalpendidikandasar.v3i2.1169

Nurnaningsih, N., Hanum, C. B., Sopandi, W., & Sujana, A. (2023). Keterampilan Berpikir Kritis dan Berpikir Kreatif Siswa Sekolah Dasar dalam Pembelajaran Berbasis RADEC. *Jurnal Basicedu*, *7*(1). https://doi.org/10.31004/basicedu.v7i1.4773

Pratama, Y. A., Sopandi, W., Hidayah, Y., & Trihatusti, M. (2020). Pengaruh model pembelajaran RADEC terhadap keterampilan berpikir tingkat tinggi siswa sekolah dasar. *JINoP (Jurnal Inovasi Pembelajaran)*, *6*(2). https://doi.org/10.22219/jinop.v6i2.12653

Rifa Hanifa Mardhiyah, Sekar Nurul Fajriyah Aldriani, Febyana Chitta, & Muhamad Rizal Zulfikar. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia. *Lectura : Jurnal Pendidikan*, *12*(1). https://doi.org/10.31849/lectura.v12i1.5813

Rindiana, T., Arifin, Muh. H., & Wahyuningsih, Y. (2022). MODEL PEMBELAJARAN RADEC UNTUK MENINGKATKAN HIGHER ORDER THINGKING SKILL DALAM PEMBELAJARAN IPS DI SEKOLAH DASAR. *Autentik : Jurnal Pengembangan Pendidikan Dasar*, *6*(1). https://doi.org/10.36379/autentik.v6i1.186

Septiyani, I. (2022). PENGARUH MODEL PROJECT BASED LEARNING TERINTEGRASI STEM SECARA DARING TERHADAP KEMAMPUAN BERPIKIR KREATIF SISWA SD. *Alpen: Jurnal Pendidikan Dasar*, *6*(1). https://doi.org/10.24929/alpen.v6i1.85

Setyawan, J., Roshayanti, F., & Novita, M. (2023). Model pembelajaran RADEC berbasis STEAM pada materi sistem koloid mampu meningkatkan kemampuan berpikir kritis siswa. *Practice of The Science of Teaching Journal: Jurnal Praktisi Pendidikan*, *2*(1). https://doi.org/10.58362/hafecspost.v2i1.29

Sholeh, B., Soffiatun, S., & Afriliani, F. (2023). Meningkatkan Ketrampilan Sosial dalam Pembelajaran IPS. *Jurnal Ilmiah Profesi Pendidikan*, *8*(2). https://doi.org/10.29303/jipp.v8i2.1609

Sidabutar, Y. A. (2021). Pengaruh Kemampuan Berpikir Kreatif terhadap Kemampuan Menulis Karangan Deskripsi Siswa Sekolah Dasar. *Jurnal Basicedu*, *5*(6). https://doi.org/10.31004/basicedu.v5i6.1658

Sofyan, F. A. (2019). IMPLEMENTASI HOTS PADA KURIKULUM 2013. *INVENTA*, *3*(1). https://doi.org/10.36456/inventa.3.1.a1803

Sopandi, W. (2021). Model Pembelajaran RADEC: Teori dan Implementasi di Sekolah. *Pedagogia : Jurnal Pendidikan*, *8*(1).

Tulljanah, R., & Amini, R. (2021). Model Pembelajaran RADEC sebagai Alternatif dalam Meningkatkan Higher Order Thinking Skill pada Pembelajaran IPA di Sekolah Dasar: Systematic Review. *Jurnal Basicedu*, *5*(6). https://doi.org/10.31004/basicedu.v5i6.1680

Twiningsih, A., & Retnawati, H. (2023). KETERAMPILAN BERPIKIR KRITIS DAN KREATIF DALAM PEMBELAJARAN IPA PADA SISWA KELAS IV DI SD. *JURNAL PENELITIAN BIDANG PENDIDIKAN*, *29*(1). https://doi.org/10.24114/jpbp.v29i1.38220

Umam, H. I., & Jiddiyyah, S. H. (2020). Pengaruh Pembelajaran Berbasis Proyek Terhadap Keterampilan Berpikir Kreatif Ilmiah Sebagai Salah Satu Keterampilan Abad 21. *Jurnal Basicedu*, *5*(1). https://doi.org/10.31004/basicedu.v5i1.645

Wulandari, F. A., Mawardi, M., & Wardani, K. W. (2019). Peningkatan Keterampilan Berpikir Kreatif Siswa Kelas 5 Menggunakan Model Mind Mapping. *Jurnal Ilmiah Sekolah Dasar*, *3*(1). https://doi.org/10.23887/jisd.v3i1.17174