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Analysis of Students' Creative Thinking Abilities through Project-Based Learning in Natural and Social Sciences in Grade Four Elementary School Students

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A B S T R A C T

Children who think creatively have four indicators, namely originality or the ability to produce new and unique ideas, fluency or the ability to produce many ideas quickly, elaborative or the ability to explain ideas in detail, and flexibility or the ability to think from various perspectives. With project-based learning (PjBL), children can practice their creative thinking skills through learning activities that are tailored to the material taught. This study aims to evaluate students' creative thinking skills through the application of PjBL, especially in science subjects in grade IV B students at SDN Tanjung Duren Selatan 01 Pagi. This study uses a descriptive qualitative method by collecting data through observation, interview, and documentation techniques. The results of the study show that the ability to think creatively through the application of project-based learning in Social Natural Sciences material is not good enough, it can be seen that the fluency indicator has a score of 77.4% and can be categorized as good, then in the flexibility indicator has a score of 19.3%, including the category of less, in the original indicator has a score of 61.2%, it can be categorized as sufficient because there are 3 groups that are able to answer teachers' questions about consumption examples with different answers. Then in the detailing category, having a score of 58.1% can be categorized as sufficient. From these results, it can be seen that there are 4 indicators of creative thinking but only 1 indicator is good, namely smoothness, then 2 other indicators are quite original and detailed, and there is 1 indicator that is still lacking, namely flexibility.

Keywords: *Creative Thinking, Project Based learning, Social Natural Sciences Learning*

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INTRODUCTION

Superior human resources can develop a country. One of them is seen from the quality of education. Education is essential for developing students' potentials such as students' thinking skills and abilities. With these skills, students can have provisions to face problems that will come in their lives. So that education can help students to learn to think creatively and productively.

According to Anderson's revision of Bloom's taxonomy, there are two levels of thought. The first level includes low-level thinking, which involves mastery of knowledge, understanding, and the ability to apply concepts. Meanwhile, the second level includes high-level thinking, which includes involvement in analysis, synthesis, evaluation, and *create* (creation) (Ririn, 2020). With safe, comfortable, and fun learning conditions, students can develop their creative thinking skills, so that when the learning process is underway, students are not easily bored or bored. So that the selection of learning methods must be right, such as applying a learning method that provides an event that students have experienced in their lives, will make students think, explore and build their own knowledge that can stick to their memory so that they can be remembered again for a long time (Mokambu, 2021).

Education is inseparable from the curriculum which is the heart of education. The curriculum plays a very important role in the world of education to create intelligent, competent, and moral students. So that the curriculum applied must be appropriate, so that students get appropriate learning goals. Along with the times, the process of improving the curriculum also often occurs, especially in Indonesia, which is useful for adjusting the needs of students in order to create an effective result.

The Ministry of Education and Culture, Research and Technology issues policies to educational units regarding the development of an independent curriculum which is expected to create and produce superior human resources in all fields, through which students are given the freedom to choose to explore the science material they like. The independent curriculum is expected to create a profile of Pancasila students (Ministry of Education and Culture, 2022).

The use of creativity can provide significant added value to human life as a whole. Therefore, it is hoped that in the learning process students can develop their creative thinking skills, especially in social studies subjects that require a creative approach to facilitate the understanding of the material (Saidah, Dwijanto, 2020).

Science subjects are a combination of science and social studies in the independent curriculum, with the aim of encouraging students to manage the natural and social environment as a whole. Science learning is considered a learning process that requires a deep understanding, considering that the focus is not only on understanding theory alone, but rather on applying concepts in practical situations. Many students have difficulty in solving Social Natural Sciences questions. Therefore, creative abilities are needed from students so that they can more easily understand the learning material, especially in science subjects that require a high level of understanding.

The problems that occurred in class IVB of SDN Tanjung Duren Selatan 01 AM Based on observations made by researchers from August 24, 2023 to August 25, 2023, there are several things that have been found in the Social Natural Sciences learning process. First, when the teacher uses video in the learning process and then explains to the students that there are still students who chat with their friends, and there are some students who do not concentrate on seeing the video that is shown by leaning their heads on the table, and occasionally yawning. Both students are still shy to answer even if they are not asked by the teacher, there are still many who are silent before being appointed directly to answer the question. Responding to the question, there are still inaccuracies and a number of errors. The majority of students still show embarrassment, but there are some who have been able to provide additional or complete answers given by their friends. On the other hand, there are also students who choose to answer by following what has been expressed by their friends before. Fourth, the ability to ask questions and express opinions is still lacking, as seen when teachers provide opportunities for students to ask questions related to the material that has been taught, only a few students actively ask questions.

Table 1 Preliminary Observations

Students	**Concentration**	**Creative Thinking of Students**			
		Smoothness	**Flexibility**	**Originalitas**	**Detail**
31	29%	12,9%	9,6%	9,6%	6,4%

Based on the above problems, according to Munandar, it is also explained that creative thinking can be defined as *fluency* (fluency), *flexibility* (flexibility), *originality* (originality), *elaboration* (detail) from one idea. Fluency is related to the large number of works, ideas or ideas produced, while authenticity shows ideas or works that are different from others. Flexibility is the ability to see a problem from a different perspective. On the other hand, elaboration includes the skill of detailing an object in detail to make it interesting (Ririn, 2020)

Based on these indicators, it can be seen that IVB students of SDN Tanjung Duren Selatan 01 Morning still have not reached an adequate and optimal level of creative thinking ability. One of the subjects to hone these skills is Social Natural Sciences. Social studies lessons are given because they cover various aspects of the natural sciences that involve physical

interaction. In addition, this lesson is prepared to develop students' mindset so that they are able to face and solve various problems in their lives (Putri & Syofyan, 2019). Using an empirical approach, science can be understood, studied, and described through several specific steps. For example, a transparent and balanced attitude is needed when submitting data so that new discoveries are revealed (S. & H. Syofyan, 2021).

The ability to think creatively has a major role in the learning process of Natural Sciences (IPA), especially in the current era of globalization. In this era, education should not only focus on the development of intelligence, but also pay special attention to the development of creativity. In addition, faced with the various challenges of the times, there are four key competencies that must be possessed, known as the 4Cs, involving Critical Thinking and Problem Solving, Creativity, Communication Skills, and the Ability to Collaborate. Therefore, in science lessons, the ability to think creatively is needed to reflect the need to prepare students to face the challenges of the current era (Simanjuntak, 2019).

By referring to the problems described above, solutions are needed to overcome challenges related to students' creative thinking skills. One of the solutions implemented by teachers in class IVB of SDN Tanjung Duren Selatan 01 Pagi is to utilize diverse learning models and focus more on developing thinking skills. Therefore, *the project-based learning* model is considered a suitable approach to hone and see students' creative thinking skills, and will be implemented by grade IVB teachers of SDN Tanjung Duren Selatan 01 Pagi.

By applying the project-based learning model to science learning, the Social Natural Sciences teaching process not only focuses on the theoretical delivery of concepts, but also involves direct application in the form of practice. This makes students directly involved in the creation of a work until it is completed, as well as providing a stimulus for them to explore their creativity and realize their creative ideas in the form of unique works. Through this learning approach, it is hoped that students can hone their creative abilities, gain additional knowledge, and develop diverse uniqueness.

Through project-based learning, it is hoped that students can increase their creativity. The PjBL learning method that uses a project approach focuses more on significant issues for students. Here, the teacher functions as a facilitator who presents issues, asks several questions, and assists students in designing the project they will implement.

With this background, the researcher felt compelled to investigate the problem through a study. Therefore, the researcher decided to give the title to this study "Analysis of Students' Creative Thinking Ability Through the Application of *Project Based Learning* in Social Science Learning" (Descriptive Study in Class IVB SDN Tanjung Duren Selatan 01 AM).

Creative Thinking

The ability to think in a creative way is essential in today's era to help develop oneself in finding solutions to problems faced on a daily basis. Without creative thinking, a person will not have development in his life. When this creative thinking ability develops, new ideas will be born from different perspectives. Generally, students who have the ability to think creatively will be more interested in finding solutions to various problems in their learning process (Mardhiyana & Sejati, 2016).

According to Tilaar, thinking has two categories, namely thinking at a basic level and thinking at a higher level. In this context, the process of high-level thinking is associated with creative thinking (Dewi et al., 2019) Martin argues that creative thinking is a skill in creating new ideas or habits to produce products (Manurung et al., 2020). Meanwhile, Munandar emphasized that creativity is the result of one-on-one interaction with the surrounding environment, where he utilizes skills to compile new combinations based on information, knowledge, or elements that are known previously in the context of society, education, or family. The indicators of creative thinking are as follows: (1) fluency (smoothness), (2) flexibility (flexibility), (3) originalty (potties), (4) elaboration (detail) (Ridwan et al., 2021).

Based on the views of the experts that have been described, it can be concluded that creative thinking is a high-level thinking activity that can create a product based on previously understood information from the surroundings.

Factors Influencing Creative Thinking

According to Rogers Creativity can be realized by 2 factors, including: (1) Self-motivation (intrinsic). (2) Motivation from the environment (extrinsic). Creative thinking can create new original ideas, usually students who already have high creative thinking skills produce many ideas that appear quickly in their brains so that students who have creative thinking skills are more interested in solving a problem in learning. Creative thinking can be seen from its characteristics in thinking such as fluency, flexibility, detail, and originality. Then creative thinking will be realized if there are two factors such as motivation from oneself and motivation from the environment.

Project Based Learning

Project-based learning is a structured educational approach that encourages learners to master basic concepts for the development of relevant competencies in the 21st century. Teaching can be through a research process based on complex and authentic questions, as well as carefully designed learning products and assignments (Nur Eva Zakiah1, Ai Book Fatimah2, 2020). PjBL is an educational model that implements innovative learning methods for contextual learning through complex and more focused activities to provide opportunities for students to create a work that has usefulness (Nur Eva Zakiah1, Ai Book Fatimah2, 2020). Based on the explanation above, it can be concluded that PjBL is a project-based learning model that invites students to think creatively in solving a problem, conducting research and completing the project.

Social Natural Sciences

In the independent curriculum, science and social studies subjects are integrated into Social Natural Sciences. Social Natural Sciences studies the lives of living things and inanimate objects in the universe, while exploring human life, both as individuals and as part of society, as well as understanding how they interact with the surrounding environment (Darniyanti et al., 2023). Meanwhile, according to (Sulkah et al., 2023) Social Natural Sciences is a subject that provides opportunities for students to ask questions, develop their ideas, and can foster their curiosity about all environments that need to be studied. Based on some of the descriptions above, Social Natural Sciences is a science that is close to students' lives to build their curiosity about various things in the environment to become more meaningful.

Science education is very useful for life. The science learning approach aims to increase skills directly through learning experiences that can support students in designing and creating a work. Elementary School (SD) science education is expected to arouse students' curiosity, get to know concepts and act to preserve and protect nature from the perspective of science, technology and society (Aris et al., 2022).

According to Carin and Sund in H. Syofyan, (2018) stated that science is the acquisition of knowledge of all other things through the collection of data obtained through observation and controlled research including human processes, products and attitudes. Science is a subject that studies events that take place around nature, so that students are expected to understand natural knowledge through daily practice (Personal & Syofyan, 2023). Then according to Sudjana (Fransisca & Mintohari, 2018) Science is a science that studies nature and all its contents. In addition, according to Ahmad Susanto (Mahardhika, 2019) Science is a human attempt to understand the universe through careful observation of the purpose and use of the methods and reasoning described to arrive at a conclusion. Based on some of the above opinions, it can be concluded that science is a science that studies nature and all its contents through the collection of data obtained by observation to reach a conclusion.

Science learning is one of the subjects that must be studied by students, especially teaching at the elementary level. Science can provide information about the surrounding environment, and can help students to hone their skills and understanding which serves as a very important tool to instill attitudes and values to respect nature that are closely related to human existence (H. Syofyan et al., 2019). Learning and understanding science is not only related to cause and effect methods, but can also be through a certain process such as observation, experimentation or rational analysis (H. Syofyan, 2018). Science learning focuses on the results of integrating life experiences rather than memorizing the meaning of words. Therefore, learning will be more valuable when students have real experiences that they have experienced and learned. Therefore, from this experience, it is hoped that students can understand science more deeply and remember it for a long period of time (Adhulhadi et al., 2021).

The scope of science can also be reviewed from three main aspects, namely the product aspect, the process skill aspect, and the scientific attitude aspect. Product aspects in science are in the form of observational results including facts, concepts, principles, laws and theories. Then the process skill aspect refers to the process of knowledge obtained through the application of a method. And furthermore, the aspect of scientific attitudes can be interpreted as beliefs, opinions, and values that must be protected by scientists, especially when trying to seek and develop new knowledge (Barus, 2022).

According to most of the students who will be researched by the author, science lessons are considered difficult because some learning themes have an abstract nature and require critical thinking, including the form of substance, the process of transforming the form of substance, and its use in daily life. Meanwhile, the characteristics of elementary school students tend to be easier to understand things that are real. Therefore, the role of teachers is very important to change subjects that are initially difficult to easy by connecting the subjects with daily life.

This study found several that were considered relevant, namely: 1) Research conducted by Setiawan et al., (2022) shows that the PjBL Model and PBL Model provide good results to make students think actively, creatively and critically so that they are able to encourage good cooperation in problem-solving activities. 2) Research conducted by Fadhilahet, al (2023) with the title "Analysis of the PJBL Model in the Creative Dimension of Pancasila Student Profile in Grade IV Students of SDN Pandean Lamper 04 Semarang" the results of the study show that the PjBL learning model can be implemented in the creative dimension of the Pancasila student profile based on the observation results of each element of the creative dimension on average providing significant results. The PjBL learning model is very useful in projects to improve the profile of Pancasila, especially in the creative dimension. The research method used by the researcher is a qualitative descriptive method of data obtained through direct observation, interviews and documentation.3) Research conducted by Stuart, (2021) with the title "Model *Project Based Learning* In Improving Students' Creative Thinking Skills in Elementary School Civilization Learning" the research method used is a descriptive qualitative research method using the Miles and Huberman analysis model. In qualitative research, data collection involves three steps: data reduction, presentation, and drawing conclusions. The results of the study showed that the *project-based learning* can increase students' creative thinking in elementary school Civilization Education.

METHOD

The research method used in this study is a qualitative approach with a descriptive research design. This approach was chosen because the researcher aims to gain an in-depth understanding of students' creative thinking abilities within the context of Project-Based Learning (PjBL) in Natural and Social Sciences. A descriptive qualitative method allows the researcher to systematically, factually, and accurately describe real conditions in the classroom based on the collected data. The focus of this study is on four indicators of creative thinking,

namely fluency, flexibility, originality, and elaboration, which are observed throughout the learning process.

The subjects of this research are fourth-grade students (Class IV B) at SDN Tanjung Duren Selatan 01 Pagi who are actively involved in project-based learning activities. Data collection techniques include observation, interviews, and documentation. Observations are conducted to examine students' activities during the PjBL process, particularly in generating ideas and completing projects. Interviews are carried out with the teacher and selected students to obtain deeper insights into their learning experiences, challenges faced, and perceptions of PjBL implementation. Documentation, such as students' work, photos of learning activities, and instructional records, is used to support and strengthen the research findings.

Data analysis is conducted qualitatively through three stages: data reduction, data display, and conclusion drawing. In the data reduction stage, the researcher selects and organizes relevant data based on the research focus. The data are then presented in a descriptive narrative form to facilitate interpretation. Finally, conclusions are drawn based on patterns and findings that emerge from the analyzed data. To ensure the validity of the data, the researcher applies triangulation techniques by comparing data obtained from observations, interviews, and documentation. Thus, the findings of this study are expected to provide a valid and comprehensive description of students' creative thinking abilities through the implementation of Project-Based Learning.

FINDINGS AND DISCUSSION

Students' Creative Thinking Skills Through the Application of *the Project-Based Teaching Model* in Elementary Science Learning

Researchers have conducted research at SDN Tanjung Duren Selatan 01 and found that students can develop their creative thinking skills by using *the Project Based Learning* learning model in science lessons. Data collection through observation, interviews, and documentation resulted in the following findings:

Model Pembelajaran Project Based Learning

A teacher must have creativity in order to be able to determine a variety of suitable learning models to be implemented in the classroom, one of which is the PjBL learning method. When using the PjBL method, teachers must choose the right material with students' abilities such as Social Natural Sciences, in line with the results of research conducted by (Puspitasari, 2023) The results of the study show that the PjBL method has been developed and is suitable for use in science studies using the independent curriculum.

By using the learning method *project based learning* In the Social Natural Sciences class IV material with the topic of buying and selling activities as a way to meet needs, in this learning activity students can show their creative abilities by demonstrating their merchandise. This is in line with research (Gunawan et al., 2018) that the application of the PjBL model can improve social studies learning outcomes and students' creative thinking skills.

In grade IV at SDN Tanjung Duren Selatan 01 Morning, students are tried to hone their creativity in thinking so as to obtain creative completeness. Therefore, in the application of *the project-based learning* method, it is often applied by teachers.

Independent Curriculum

The independent curriculum provides opportunities for students to develop quality learning, in accordance with the learning needs of students. It is hoped that this curriculum will produce a creative Pancasila student profile. In line with other research findings (Sumarsih et al., 2022) which shows that the free curriculum used in the driving school produces students who are moral, independent, critical, creative, mutual cooperation and tolerant. The curriculum has been implemented at SDN Tanjung Duren Selatan 01 Pagi for 2 years and only 4 classes, namely grades 1, 2, 4 and 5. Teachers can act as facilitators in this curriculum and choose a variety of learning resources to tailor learning to students' learning

needs and interests. This is in line with the results of the research (Arviansyah & Shagena, 2022) which says that teachers must also help students in learning. This is done so that the goal of free learning from the Ministry of Education and Culture can be realized. Therefore, in this independent curriculum, teachers can use a learning approach that can encourage students to think creatively, one of which is Pancasila profile students.

Creative Thinking

Creativity is a natural ability that every individual has, but it needs to be developed and guided. Creative thinking has characteristics such as fluency to create flexibility, being able to think originally, and having detailed thinking to develop ideas. Measuring students' creative thinking by teachers can be by providing triggering questions. Because the spark questions can arouse students' creative thinking. This is in line with the results of research from (Palapessy et al., 2023) The results of his research stated that providing a spark with open-ended questions can trigger children to think creatively. Because students must have creative thinking skills so that they can understand the subject matter easily, teachers should help children by asking questions that hone their creative thinking skills. Therefore, it can be concluded that teachers use trigger questions to improve students' creative thinking skills.

Supporting and Inhibiting Factors of Creative Thinking through the Application *of the Project Based Learning Model* in Social Science Learning for Grade IV Elementary School Students

Researchers found that there are supporting and inhibiting factors in the ability to think creatively as follows:

Supporting Factors

Supporting factors in creative thinking are: 1) support from yourself, self-support in creative thinking, namely by having a passion for learning so that you can master learning well. 2) Support teachers, and their friends, namely by providing motivation in learning so that children can hone their creative thinking skills well. This is in line with the results of the research (Fauziah & Zulfiati, 2021) said that factors that support a student's ability to think creatively include attention from parents, enthusiastic support from friends, teachers, and the school environment, and student active participation.

Inhibiting Factors

Inhibiting factors in the ability to think creatively are: 1) inhibition of oneself, inhibition of oneself in creative thinking, namely limited IQ which results in children being slow in thinking. 2) Parents can also be said to be an obstacle to creative thinking, namely with a lack of support from parents and a lack of attention to children so that children become less enthusiastic in learning. This is in line with the results of research conducted by Fauziah & Zulfiati, (2021) which says that The inhibiting factors include student character, inappropriate teacher attitude, and lack of support from parents. 3) KSchool facilities are an inhibiting factor in honing creative thinking, for example, the lack of printers or LCDs which hinder teachers in carrying out teaching and learning activities so that they can be an inhibiting factor for students in honing creative thinking.

CONCLUSIONS

According to the results of research and evaluation conducted on students' ability to think creatively through the application of PjBL applied to science subjects in grade IV elementary school, it can be concluded that within the scope of science which includes the fields of natural and social sciences, a careful approach is needed in the development of learning. Teachers have planned learning well from the beginning, by making lesson plans that are tailored to the *learning objectives of project-based learning* in accordance with the standards of achieving steps in the learning process. In the implementation is not good enough, this can be seen from the child showing his creative thinking ability, there are 4 indicators of creative thinking but only 1 indicator is good, namely smoothness, then 2 other

indicators are quite original and detailed, and there is 1 indicator that is still lacking, namely flexibility. In the implementation *of project-based learning,* there are points that are not implemented properly such as conceptualizing project planning, formulating schedules, testing results, and providing conclusions

REFERENCES

Adhulhadi, Putri, A. A., Putri, I. R., & Syofyan, H. (2021). Analisis Aktivitas Pembelajaran IPA Pada Materi Cahaya Di Kelas IV SDN Cakung Barat 15. *Seminar Nasional Ilmu Pendidikan Dan Multi Disiplin*, *4*, 22–27.

Arasid, M. I. (2021). *Model Project Based Learning Dalam Meningkatkan Kemampuan Berpikir Kreatif Peserta Didik Pada Pembelajaran PPKn Sekolah Dasar*. 1–12.

Aris, I. E., &, & Afina, F. (2022). Pengaruh Penggunaan Media Diorama Terhadap Hasil Belajar Kognitif Ipa Materi Siklus Air Pada Siswa Kelas V Sd Negeri Kebanyakan Kota Serang. *Jurnal Primagraha*, *3*(1), 1–14.

Arviansyah, M. R., & Shagena, A. (2022). Efektivitas dan Peran Guru Dalam Kurikulum Merdeka Belajar. *Perspektif : Jurnal Pendidikan Dan Ilmu Bahasa*, *17*(1), 40–50. https://doi.org/10.59059/perspektif.v1i4.766

Asyiq, A. (2020). *Pengaruh Latihan Lisan Terhadap Tingkat Kreativitas Belajar Bahasa Arab Siswa*. *4*(2), 183–202.

Barus, M. (2022). Literasi Sains Dan Pembelajaran IPA di Sekolah Dasar. *Pendistra*, *5*(1), 17–23.

Darniyanti, Y., Rahmayati, I., & Filahanasari, E. (2023). Pengembangan Modul Pembelajaran Berbantu Canva Mata Pelajaran IPAS untuk Mendukung Merdeka Belajar Kelas IV di Sekolah Dasar. *Jurnal Basicedu*, *7*(3), 1507–1517. https://doi.org/10.31004/basicedu.v7i3.5631

Dewi, S., Mariam, S., & Kelana, J. B. (2019). Meningkatkan Kemampuan Berpikir Kreatif Ipa Siswa Sekolah Dasar Menggunakan Model Contexual Teaching and Learning. *JP2SD (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, *02*(06), 235–239. https://journal.ikipsiliwangi.ac.id/index.php/collase/search/search?query=CONTEXTUAL+&authors=&title=&abstract=&galleyFullText=&suppFiles=&dateFromMonth=&dateFromDay=&dateFromYear=&dateToMonth=&dateToDay=&dateToYear=&dateToHour=23&dateToMinute=59&dateToSe

Fauziah, A. R., & Zulfiati, H. M. (2021). Penanaman Karakter Mandiri dan Kreatif Melalui Pembelajaran Tematik Bermuatan IPS pada Siswa Kelas V di SD N 1 Sekarsuli Banguntapan Bantul. *Wacana Akademika: Majalah Ilmiah …*, *5*(2), 173–179. https://jurnal.ustjogja.ac.id/index.php/wacanaakademika/article/view/8788%0Ahttps://jurnal.ustjogja.ac.id/index.php/wacanaakademika/article/download/8788/4571

Fransisca, I., & Mintohari. (2018). *Pengembangan Media Pembelajaran Video Berbasis Sparkol Videoscribe Pada Pelajaran Dalam Materi Tata Surya Kelas IV SD*. *06*(11), 1916–1927.

Gunawan, B., Relmasira, S. C., & Hardini, A. tyas asri. (2018). Penerapan Model Pembelajaran Project Based Leaening Untuk Meningkatkan Hasil Belajar IPA Dan Kemampuan Berfikir Kreatif Siswa Kelas V SD. *Gender and Development*, *2*(1), 32–45. http://www.uib.no/sites/w3.uib.no/files/attachments/1._ahmed-affective_economies_0.pdf%0Ahttp://www.laviedesidees.fr/Vers-une-anthropologie-critique.html%0Ahttp://www.cairn.info.lama.univ-amu.fr/resume.php?Id_Article=Cea_202_0563%5Cnhttp://www.cairn.info.

Kemdikbud. (2022). *Kurikulum Merdeka Beri Kebebasan Siswa Memilih Materi Pembelajaran*. https://www.kemdikbud.go.id/main/blog/2022/08/kurikulum-merdeka-beri-kebebasan-siswa-memilih-materi-pembelajaran

Kemendikbud. (2022). *Permendikbud Ristek Nomor 7 Tahun 2022 Tentang Standar Isi Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, Dan Jenjang Pendidikan Menengah*. https://bpmpkaltim.kemdikbud.go.id/2022/02/permendikbud-ristek-nomor-5-tahun-2022-tentang-standar-kompetensi-lulusan-pada-pendidikan-anak-usia-dini-

jenjang-pendidikan-dasar-dan-jenjang-pendidikan-menengah/

Mahardhika, A. (2019). *Pengaruh Model Pembelajaram Contextual Teaching And Learning (CTL) Terhadap Prestasi Belajar IPA Siswa sekolah Dasar*. *April*, 7–11.

Manurung, A. S., Halim, A., & Rosyid, A. (2020). Pengaruh Kemampuan Berpikir Kreatif untuk meningkatkan Hasil Belajar Matematika di Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 1291–1301. https://doi.org/10.31004/basicedu.v4i4.544

Mardhiyana, D., & Sejati, E. O. W. (2016). Mengembangkan Kemampuan Berpikir Kreatif dan Rasa Ingin Tahu Melalui Model Pembelajaran Berbasis Masalah. *PRISMA, Prosiding Seminar Nasional Matematika*, *1*(1), 672–688.

Mokambu, F. (2021). Pengaruh Model Project Based Learning Terhadap Kemampuan Berpikir Kreatif Siswa Pada Pembelajaran Ipa Di Kelas V SDN 4 Talaga Jaya. *Prosiding seminar nasional pendidikan dasar "Merdeka Belajar Dalam Menyambut Era Masyarakat 5.0," November*, 56–62.

Nur Eva Zakiah1, Ai Tusi Fatimah2, Y. S. (2020). *Implementasi project-based learning untuk mengeksplorasi kreativitas dan kemampuan berpikir kreatif matematis mahasiswa*. *5*(2), 265–291.

Palapessy, X. K. A., Ningrum, M. A., Adhe, K. R., & Widayanti, M. D. (2023). Analisis Project Based Learning (PjBL) Untuk Kemampuan Berpikir Kreatif Anak. *PENDIPA Journal of Science Education*, *7*(3), 431–438. https://doi.org/10.33369/pendipa.7.3.431-438

Pribadi, H. A., & Syofyan, H. (2023). *The Effect of Audiovisual Media on Students ' Creative Thinking Ability in Class V Science Subject*. *2*(7), 1611–1626.

Puspitasari, V. & A. W. (2023). Analisis Penerapan Project Based Learning (PJBL) Pada Pembelajaran IPAS Siswa Kelas 4 Dengan Kurikulum Merdeka. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *08*(2), 2517–2530.

Putri, S., & Syofyan, H. (2019). Pengaruh Kompetensi Guru Kelas Terhadap Minat Sekolah Dasar Negeri Tanjung Duren Utara 02. *Jurnal Pendidikan Dasar*, *X*, 1–11.

Rani, H. (2021). *Penerapan Metode Project Based Learning pada Pembelajaran Sejarah Kebudayaan Islam dalam Meningkatkan Motivasi Belajar*. *10*(2), 95–101.

Ridwan, Y. H., Zuhdi, M., Kosim, K., & Sahidu, H. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Model Problem Based Learning Untuk Meningkatkan Kemampuan Berpikir Kreatif Fisika Peserta Didik. *ORBITA: Jurnal Kajian, Inovasi Dan Aplikasi Pendidikan Fisika*, *7*(1), 103–108. https://doi.org/10.31764/orbita.v7i1.3832

Ririn, P. (2020). *Analisis Kemampuan Berpikir Kreatif Siswa Melalui Penerapan Model Project Based Learning Dalam Pembelajaran IPS*.

Rozaq, mohammad iftitachur, & Kocimaheni, A. A. (2019). *Kesesuaian Rencana Pelaksanaan Pembelajaran (RPP) Dengan Pelaksanaan Pembelajaran Bahasa Jepang Di Kelas X SMA*. *3*(2), 1–9.

Saidah, Dwijanto, & I. J. (2020). Kemampuan Berpikir Kreatif Siswa dalam Pembelajaran Matematika. *Jurnal Ilmu Pendidikan, 2012*, 1042–1045.

Setiawan, T., Sumilat, J. M., Paruntu, N. M., Monigir, N. N., & Monigir, N. (2022). *Analisis Penerapan Model Pembelajaran Project Based Learning dan Problem Based Learning pada Peserta Didik Sekolah Dasar*. *6*(6), 9736–9744.

Simanjuntak, M. D. R. (2019). Membangun Ketrampilan 4 C Siswa Dalam Menghadapi Revolusi Industri 4.0. *Prosiding Seminar Nasional Fakultas Ilmu Sosial Universitas Negeri Medan*, *3*, 921–929.

Sulkah, U., Rukmi, A. S., & Pratiwi, A. (2023). Penggunaan Media Pembelajaran Audio visual berbasis Microsoft Powerpoint untuk Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran IPAS Kelas IV SDN Pakis 1/368 Surabaya. *Innovative: Journal Of Social Science Research*, *3*(2), 3530–3539.

Sumarsih, I., Marliyani, T., Hadiyansah, Y., Hernawan, A. H., & Prihantini. (2022). Analisis Implementasi Kurikulum Merdeka Di Sekolah Penggerak Sekolah Dasar. *Pahlawan: Jurnal Pendidikan-Sosial-Budaya*, *6*(5), 8248–8258. https://doi.org/10.57216/pah.v18i2.480

Syofyan, H. (2018). *Analisis Gaya Belajar Dan Motivasi Berprestasi Terhadap Hasil Belajar IPA*. *3*(2), 76–85. https://www.esaunggul.ac.id/wp-content/uploads/2018/02/4.-Analisis-Gaya-Belajar-Dan-Motivasi-Berprestasi-Terhadap-Hasil-Belajar-IPA.pdf

Syofyan, H., Zulela, & Sumantri, M. S. (2019). *Pengembangan Awal Bahan Ajar IPA Di Sekolah Dasar*.

Syofyan, S. & H. (2021). Pengembangan Media Pop Up Book Pada Pembelajaran IPA Di SD. *Jurnal Pendidikan Dasar*, 110–122. https://doi.org/10.51178/jesa.v2i4.321

Umi Fadhilah,Mira Azizah, Fenny Roshayanti, S. H. (2023). *Analisis Model PJBL Dalam Dimensi Kreatif Profil Pelajar Pancasila Pada Peserta Didik Kelas IV SDN Pandean Lamper 04 Semarang*. *5*(2), 4435–4440.