



The Application of Project-Based Learning in the Independent Curriculum to Increase Student Creativity in PAI Subject at School

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Abstrak

Penelitian ini berlatar belakang pada kenyataan di dunia pendidikan bahwa rendahnya aktivitas belajar peserta didik yang terjadi di kelas saat proses belajar mengajar. Banyak peserta didik yang belum mampu menyelesaikan tugas proyek yang diberikan oleh pendidik secara maksimal. Model pembelajaran *project based learning* (PjBL) merupakan pendekatan pembelajaran yang mendorong peserta didik untuk mendapatkan wawasan dan pengetahuan baru berdasarkan pengalaman masing-masing individu supaya tercipta peserta didik yang memiliki pemikiran kritis, aktif, dan kreatif. Jenis penelitian yang digunakan dalam penulisan ini adalah studi literatur (*library research*) yang bertujuan untuk mengetahui efektivitas penerapan model pembelajaran *project based learning* (PjBL) dalam pembelajaran Pendidikan Agama Islam dan Budi Pekerti pada tingkat sekolah menengah atas. Pertama-tama peneliti merumuskan masalah penelitian kemudian dilanjutkan dengan menelusuri penelitian yang sudah ada dan relevan sebagai bahan analisis. Bahan penelitian ini diambil dari jurnal-jurnal, buku-buku, maupun artikel-artikel yang terdapat pada jurnal online, hasil skripsi, repository, maupun Google Scholar yang di analisis berdasarkan permasalahan yang ada. Dari hasil penelitian beberapa karya ilmiah yang relevan menunjukkan bahwa model pembelajaran *project based learning* (PjBL) pada mata pelajaran Pendidikan Agama Islam dan Budi Pekerti di tingkat sekolah menengah atas efektif diterapkan dalam meningkatkan hasil belajar peserta didik.

Kata Kunci *Project Based Learning (PjBL), pendidikan agama Islam dan Budi Pekerti*

Abstract

This study is founded on the fact that students' low learning activities in class during the teaching and learning process are a reality in the world of education. Many students were unable to fully complete the project assignments that the teacher gave them. In order to develop students who have critical, active, and creative thinking, the project based learning (PjBL) learning paradigm promotes students to gain new insights and information based on each individual's experience. In order to ascertain the success of the application of the project based learning (PjBL) learning model in teaching Islamic Religious Education and Character at the high school level, a literature study (library research) was employed as the method of research in this article. The researcher first formulates the research problem before moving on to locating prior, pertinent research as the basis for their analysis. This study is based on the observation that in the world of education, low levels of student learning activities during the teaching and learning process are a reality.

keywords *project based learning, Islamic religious education and character*

Introduction

Education is a means to advance all aspects of the life of Indonesian society, including economy, society, technology, security, skills, noble personality, welfare, culture and national glory. The education curriculum should be timely based on dynamic life, not static to the essence of humanization education. The Merdeka Curriculum introduced by the Ministry of Education and Culture aims to provide greater freedom and flexibility to teachers and schools in designing learning that suits the needs and potential of students. One approach that is relevant and in accordance with the spirit of the Merdeka Curriculum is Project Based Learning (PjBL). The PjBL method focuses on developing critical thinking skills, collaboration, and creativity through the completion of projects that are real and relevant to students' lives (Anwar, 2022).

The learning process is essentially an interaction activity between teachers and students where they are involved in interactions that require reciprocity to determine the extent of understanding and delivery of material. In other words, the learning process is not only done in one direction as the teacher is always actively delivering the material but students must also take an active role. Islamic Religious Education (PAI) plays an important role in shaping the character and morals of students at school. This subject not only emphasizes on the understanding of religious concepts, but also on the application of Islamic values in daily life. However, in practice, Islamic Education teaching is often still dominated by conventional learning methods that tend to be one-way and involve less active student participation. This results in low levels of creativity and student engagement in the learning process (Anggraini & Wulandari, 2020).

As time goes by, the demand for highly competitive human resources in the future needs to be considered. Competition is inevitable because the demands of life are getting tighter every year. The development of creativity in learning activities needs to be emphasized, because with increased student creativity, it also affects student learning outcomes. This can be one of the solutions to improve the quality of education, so as to achieve educational goals. However, it is certainly not easy. Teachers must play a role in developing the right learning model

to be applied in teaching and learning activities at school. (Nugraha, Firosalia Kristin, 2018)

The skills required in learning today are not only the ability to memorize as happens in most learning processes in Indonesia. However, currently more emphasis is placed on critical thinking, creative thinking, and the ability to be able to solve problems that occur in the daily lives of students. According to a journal from (Jannah et al., 2020) explained that 21st century learning is based on technological demands that are balanced with the demands of the needs of the industrial revolution which aims to equip students with life skills such as 4C skills (critical thinking, communication, collaboration, and creativity). These 4C skills are said to be very important because these activities provide students with the ability to collaborate in groups by trying to solve certain problems, increase tolerance for differences in opinion among peers and think critically and creatively to solve problems related to connecting things in life.

From some of the observations that have been made, increasing creativity and productivity is done by designing interesting learning. Pramudita and Anugraheni (Pramudita & Anugraheni, 2017) He argues that learning is a teacher activity in designing learning that is able to activate students during the learning process. This research was conducted by applying the Project Based Learning (PjBL) learning model where this learning model will invite students to create a project that produces products from student thinking independently.

The application of PjBL in PAI subjects can be a solution to improve student creativity. With PjBL, students are encouraged to actively seek information, work together in groups, and produce real work related to PAI materials. This process not only deepens their understanding of religious teachings, but also develops creative thinking and problem solving skills that are indispensable in facing future challenges.

This study aims to examine the application of Project Based Learning in the Merdeka Curriculum in PAI subjects at school, and analyze its impact on increasing student creativity. Thus, it is expected to contribute to the development of more effective and innovative learning methods in order to create a generation that is not only academically intelligent, but also creative and characterized.

Method

The type of research used in this writing is a literature study (Library Research), which is an activity carried out systematically to collect, process, and conclude data using certain methods/techniques in order to find answers to the problems faced through library research. The literature study research design used is narrative review. Narrative Review is a type of research that summarizes theories, examines studies, and investigates methods used in existing research.

The data used in this research is secondary data. Secondary data sources are additional data sources that come from written sources or other sources. In this study, the authors used several sources taken from journals, books, and articles found in online journals, thesis results, repositories, and Google Scholar which were analyzed based on existing problems.

The data analysis technique in this research is carried out by descriptive qualitative analysis by describing the data, analyzing and discussing the data, and reviewing the conclusions of the data obtained. The method of data collection in this study is to search for or explore data from various sources of literacy related to what is intended in the formulation of research problems. The data that has been obtained from various literacy sources is collected as a unit that is used to answer the problems that have been formulated in this study.

Result and Discussion

Project Based Learning (PjBL)

The Project Based Learning (PjBL) learning model is learning that focuses on projects/activities as its goal. In the process of implementing learning, PjBL emphasizes student activities in finding information and then processing it into something that is useful for student life and the lives of others, but still in accordance with the limits of the basic standards and competencies set by the curriculum at each level. (Nugraha, Firosalia Kristin², 2018).

The learning steps of the project-based learning model as developed by *The George Lucas Educational Foundation* (Wahyu, 2016) terdiri dari 1) *Start With the Essential Question*, where learning begins with essential questions. 2) *Design a Plan for the Project*, planning collaboratively between teachers and learners so that students feel "ownership" of the project. 3) *Create a Schedule*, develop a schedule of activities to complete the project. 4) *Monitor the Student and The Progress of the Project*, monitor learners' activities while completing the project.

5) *Assess the Outcome*, provide an assessment to help the teacher in developing the next learning strategy. 6) *Evaluate the Experience*, The teacher and learners reflect on the activities and results of the project that have been carried out by expressing the feelings and experiences of students while completing the project.

Learning that applies the project-based learning model is learning that utilizes problems and then presents them in the form of activities to determine fundamental questions as a starting point for obtaining and integrating sophisticated insights based on experience during actual activities. PjBL is structured to be applied to complex problems where it is needed by students when carrying out investigations and then concluding them. PjBL is a teaching and learning process activity with active student involvement to carry out activities that are useful in providing solutions to the problems of a community of citizens or certain groups. (Widayanto & Farida, 2022).

Indicators of Creativity in PAI Learning

Learning creativity is the ability to find ways to solve problems faced by students in learning situations based on student behavior in order to deal with changes that cannot be avoided in the development of the student learning process. The indicators of learning creativity are 1) having great curiosity, 2) giving many ideas and suggestions in a problem, 3) being able to express opinions spontaneously and not being shy, 4) often asking weighty questions, 5) having a high and strong imagination, 6) being able to propose thoughts, ideas for solving problems that are different from others, 7) having their own opinions and where to express them and not being easily influenced by others, 8) enjoying trying new things, 9) being able to develop from detailing an idea or idea, 10) being able to work alone. (Anggraeni et al., 2023)

In an effort to improve human resources, developing students' creativity is one of the most important things. The indicators in creative thinking include: First, thinking fluently, in this indicator students are able to think to find problem-solving ideas. Second, flexible thinking, in this indicator students are able to think solutively. Third, original thinking, in this indicator students are able to answer in their own words that are easy to understand. Fourth, elaboration skills, in this indicator learners can explain broadly and in detail an answer. (Dewi Anggelia et al., 2022).

In the current era, PAI learning is expected to keep up with the times, considering that PAI learning is not only learning about the science of the world, but also the science of the hereafter. PAI learning is expected to provide more opportunities for students to be creative. (Choli, 2020).

Utami Munandar revealed that creativity can be formulated as an ability that reflects fluency, flexibility and originality in thinking as well as the ability to collaborate imagination and creativity. Meanwhile, according to Santrock, it is the ability to think about things in new and unusual ways and give birth to a unique solution to the problems faced. (Sidiq & Muqowim, 2020). The indicators of creativity are the ability to think critically, emotional sensitivity, talent and imagination. From these four dimensions, there are many definitions of creativity, as follows (Din et al., 2020).

1. Critical Thinking Ability or Rational Thinking Creativity is viewed from the function of rational thinking. Creativity is a function of knowledge, imagination and evaluation. The process includes fact finding, problem finding, idea finding, solution finding, and acceptance of findings. Critical thinking is an aspect of thinking. Critical thinking is a form of learning, which is a means of generating new knowledge by using critical thinking. The tools of manipulation of knowledge (seperti analisis, pemahaman dan sintesis). Fokus berfikir kritis adalah penilaian (the assessment) Critical thinking is concerned with problems, cases or issues that are complex and require alternative opinions or perspectives; and require in-depth involvement in a problem/issue. Critical thinking is usually concerned with problems, cases or issues that are complex and require alternative opinions or perspectives; and requires one's deep involvement in a problem/issue (subjectmatter) (Fachruddin, 2017). 2. Emotional Sensitivity A high-level development of emotions, creativity is viewed from the function of emotions: focusing emotional abilities and self-actualization. Creativity is the ability to self-actualize, to step out of one's personality into the field. Emotional sensitivity is the ability to adapt to different situations and conditions and the ability to control or master certain conditions and be able to control reactions and behavior, learners who have emotional sensitivity are able to recognize and manage their emotions so that they can motivate themselves, can also adapt to the

emotions of others so that they can easily build relationships with others (Dewi, 2018). 3. Gifted, High Level Development of Mental and Physical Based on the aspect of innate talent, including artistic production: creativity brings something in its new form, the expression of a person to actualize himself or herself (Muqodas, 2015). Talented learners have the characteristics of easily grasping lessons, having a strong memory and enjoying learning, a very broad vocabulary and having sharp reasoning, mastering many materials and fluent self-expression and having sharp observations in learning. 4. High Imagination A high level of consciousness, the result of imagination, fantasy, and fast problem solving. A high-level function of consciousness, events can only be understood based on past experiences that settle in the subconscious. Without reference to the level of consciousness, creative action will not arise. Imagination is the ability of learners to imagine, or create a picture of events based on reality or one's experience, while according to Rahmawati and Kurniaty imagination is a person's divergent thinking ability that is carried out without limits, as broad as possible and multi-perspective in responding to a stimulus. (Pangestu & Kurniawati, 2019).

Increasing Student Creativity in PAI Learning

Increased student creativity can be measured by four indicators, namely students have the ability to think critically, have emotional sensitivity, are talented and have a high imagination, the following is a discussion of the research results regarding the achievement of indicators of increased creativity.

First, the ability to think critically. The indicators of students who have the ability to think critically are able to formulate the main problems of the material studied, able to reveal facts in a problem, able to choose logical arguments and able to detect the right choice in solving a problem. Students have the ability to think critically because if students are given a task in the form of a problem case they are able to work on the task of these cases by identifying the source of the problem and then formulating the main points of the problem, then looking for information on the truth of the case and then revealing the facts needed to solve a case and they also have the ability to detect the right choice in choosing a solution to a problem. When PAI teachers use the discussion method, students in

the discussion are able to choose logical, relevant and accurate arguments. These are all characteristics of people who have critical thinking skills.

Second, having emotional sensitivity, the ability of learners who have emotional sensitivity is able to accept other people's points of view, have empathetic traits, have awareness in emotional regulation, and empathize, and have the ability to socialize. When learning Islamic Religious Education, then the PAI teacher uses the discussion method, in discussing differences in viewpoints on the material discussed is common but participants are able to accept differences in viewpoints and they are well aware that differences in views in discussions are natural because everyone has the freedom to argue, which becomes a problem if we cannot accept the difference. Although they accept the differences, they still have a firm stance on what they think is right.

In the process of learning Islamic Education sometimes also raises very urgent issues in the discussion method, such as the problem of RAS or belief in a mazhab and tolerance between religious ummah, in the process of discussion like this, discussion participants are sometimes provoked by their emotions to fight the course of the discussion but students are able to regulate their emotions when facing problems like that because they understand that the problem of RAS, the problem of belief is a personal matter that must be respected and this is all they get because of the differentiated learning process that requires students to multiply literacy and numeracy.

Third, talented, the characteristics of a talented person are that they easily grasp lessons, have a good memory, a wide vocabulary, quite sharp reasoning, good concentration, master a lot of material, enjoy learning, fluent self-expression, fairly good observation. Looking at these characteristics, after implementing independent learning, namely differentiated learning, especially in the subjects of Islamic Religious Education and Character Education, students' grasping capacity is quite good because supported by the pattern of implementing learning, the routines and procedures are quite interesting, and students' concentration can be maintained well because the active learning process is the students, the theory discussion is not too long, the teacher only explains the route and procedures and then the ones carrying out the learning are the students, so the students have to

master a lot of material from the material being studied, because they find the learning materials themselves automatically they have a wide vocabulary and sharp reasoning so that they also have fluent self-expression. The discovery of students' talents is indeed partly discovered by the students themselves/heredited, but talents can also be discovered through habituation, with differentiated learning which is a one-sided and centered process. students who force students to enrich themselves with learning materials, get used to being active, argue, reason, train concentration and memory and become good observers when their friends are, talented students will emerge in the class.

Fourth, they have the power of imagination, students who have the power of imagination are characterized by the ability to develop thinking power, always imagine to produce a work, do not like copying other people's work or resembling other people's work and like to be themselves. Based on this description, after implementing independent learning Students have very developed thinking power, this is based on the concept of student-centred learning, they are accustomed to using their thinking power so that the more often they are used, the wider their range of thinking becomes. Because we are used to thinking, we finally enter the world of imagination. In the world of imagination, brilliant ideas emerge which are ultimately expressed in the form of a work.

Implementation of PJBL

From the journal entitled **The Effectiveness of Project Based Learning (PjBL) on Increasing Creativity and Learning Outcomes**, the result is that project based learning applied in experimental classes is able to increase and generate encouragement for students to be more courageous and free to explore and actualize students' desires in learning. through making projects, which makes it easier for students to understand the lesson and do it directly. This can happen because students interact and immediately practice what they have learned and are free to explore and plan what they want to create in carrying out the learning project. The project based learning learning method is also effective in increasing the ability to increase creativity and learning outcomes, with evidence that the percentage of creative ability in the experimental class that applied this learning method was 76.88% with creative criteria, while

the control class using conventional learning methods was 57.73%. with the criteria being quite creative and the average learning outcome in the experimental class was 87.87 while in the control class it was 76.81(Mega Farihatun et al., 2019).

From the journal entitled Application of the Project Based Learning Model (PjBL) to increase student creativity, data was obtained that student learning creativity can be increased through the PjBL learning model. Overall, the percentage of each item on the student learning creativity observation sheet in cycle II obtained a higher score than cycle I, and the average score in cycle III was higher than cycle II. This is because the implementation of PjBL invites students to solve problems and discover new concepts. This also means that the application of the PjBL model has a real effect on student learning creativity. The PjBL model can be applied to other learning to provide learning variations and is also expected to be able to have a positive impact on improving student learning outcomes. The application of the Project Based Learning (PjBL) model can increase student learning creativity in arts and culture subjects, referring to the syntax of the PjBL model (Yusika & Turdjai, 2021).

From the journal entitled Increasing Student Creativity in Thematic Learning Using the Project Based Learning Approach, there is an increase in the learning creativity of class 5 students which is attempted using the PjBL approach, supported by the results of student learning creativity in cycle 1 which shows that 52.38% of the 21 students have the criteria high creativity has increased to 80.95% from 21 students who have high creativity criteria in cycle 2. Increasing student learning creativity with a project based learning approach is attempted by using learning steps starting with asking questions, planning a project for making experimental videos of the heat transfer process, preparing a schedule activities during the process of making experimental videos, supervising the process of making experimental videos, assessing experimental video results, evaluating experimental results by reflecting on heat transfer experimental activities. Through the project based learning approach, students are trained to face problems, discuss plans for solving them, solve problems, and be responsive to the problems they face (Faizah & Kamal, 2021).

From the journal entitled Literature Study: Effectiveness of Implementing PjBL in Islamic Education and Character Learning at High School Level. The results of the analysis of several scientific works above can be said that the PjBL learning model is not only to improve student learning outcomes, but can also increase creativity. , critical reasoning, and also students become more active in participating in learning. It can be seen from the data that has been examined that in each study, various kinds of improvements in student learning outcomes were obtained, starting from the lowest presentation level of 32.2% to the highest percentage of 92.9%. The implementation of Islamic Religious Education and Character Education learning at the high school level using the project based learning (PjBL) learning model is expected to improve learning outcomes as much as possible and can increase the experience and insight of students' knowledge and also make the learning process more interesting. (Masruri & M. Misbah, 2023).

From the journal entitled Project Based Learning Model in PAI Learning at SMKN 1 Berau, East Kalimantan. The results of research conducted at SMK Negeri 1 Berau regarding the implementation of PAI learning using the Project Based Learning model is carried out through stages starting from determining basic questions, making product design plans, preparing production schedules, monitoring students regarding the progress of projects carried out, assessing results and evaluating learning experiences. In its implementation, learning using a project-based learning model can broaden insight and provide new experiences to students. Because project implementation really starts with preparation, preparation of materials and packaging, and ends with the product sales process. Students are directly involved in the marketing process, thereby providing experience on how to market a product. Product marketing is carried out directly and via the WhatsApp and Instagram applications. The reaction and feedback from the students was extraordinary and they were very enthusiastic about working on the project in the hope of gaining new experience in making, packaging and marketing products. Apart from that, students also feel happy because they get profits from the sales (Samsiadi & Romelah, 2022).

Conclusion

The application of the project based learning (PjBL) learning model can be applied in all subjects which are adapted to the existing sub-materials. This learning model can also be applied to Islamic Religious Education and Character Education (PAI BP) subjects where new problems are often discovered in accordance with current developments.

Project Based Learning (PjBL) has several advantages to be applied in learning, namely: 1) increasing students' sense of learning motivation to learn, encouraging their ability to do important work and they need to be appreciated; 2) the increase makes students more active and successful in solving complex problems; 3) train to utilize media and materials for artistic and technological creations through the principles of ergonomics, hygienic, precise – precise – precise, ecosystemic and metacognitive; 4) produce finished and appreciative works that are ready to be utilized and used in life as well as being insightful and the basis for appropriate development of the latest technology and local wisdom technology.

Project-based learning is an in-depth investigation of a topic from the real world. This project is well designed so that students are able to overcome real problems and important issues that occur in everyday life in accordance with current developments, especially those that occur in the learning process.

The results of research from several references that have been studied provide the conclusion that the application of the project based learning (PjBL) learning model in Islamic Religious and Character Education (PAI BP) subjects at the high school education level is very effective because it can help educators and students in the process. learning. This can be proven by data which reveals that there has been an increase in student learning outcomes. Apart from that, the project based learning (PjBL) learning model can also make educators and students active in learning and more creative, students' self-confidence increases, and they are able to work and complete independently in making projects assigned by educators.

Reference

- Anggraeni, A. R., Anugrahana, A., & Yan Ariyanti, P. B. (2023). Penerapan Model Pembelajaran Project Based Learning terhadap Kreativitas Siswa dengan Menggunakan Bahan Alam pada Kelas 1 SD Negeri Plaosan 1. *Jurnal Pendidikan Tambusai*, 7(1), 3683–3690. <https://doi.org/10.31004/jptam.v7i1.5790>
- Angraini, P. D., & Wulandari, S. S. (2020). Analisis Penggunaan Model Pembelajaran Project Based Learning Dalam Peningkatan Keaktifan Siswa. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 9(2), 292–299. <https://doi.org/10.26740/jpap.v9n2.p292-299>
- Anwar, A. (2022). Media sosial sebagai inovasi pada model PjBL dalam implementasi Kurikulum Merdeka. *Inovasi Kurikulum*, 19(2), 239–250. <https://doi.org/10.17509/jik.v19i2.44230>
- Choli, I. (2020). Pendidikan Agama Islam Dan Industri 4.0. *Tahdzib Al-Akhlaq: Jurnal Pendidikan Islam*, 3(2), 20–40. <https://doi.org/10.34005/tahdzib.v3i2.891>
- Dewi Anggelia, Ika Puspitasari, & Shokhibul Arifin. (2022). Penerapan Model Project-based Learning ditinjau dari Kurikulum Merdeka dalam Mengembangkan Kreativitas Belajar Pendidikan Agama Islam. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 7(2), 398–408. [https://doi.org/10.25299/al-thariqah.2022.vol7\(2\).11377](https://doi.org/10.25299/al-thariqah.2022.vol7(2).11377)
- Dewi, S. S. (2018). Kecerdasan Emosional dalam Tradisi Upa-Upa Tondi Etnis Mandailing. *Anthropos: Jurnal Antropologi Sosial Dan Budaya (Journal of Social and Cultural Anthropology)*, 4(1), 79. <https://doi.org/10.24114/antro.v4i1.10039>
- Din, H., Somadayo, S., & Hadi, D. (2020). Membangun Kreativitas Siswa Sekolah Dasar Dalam Pembelajaran Menulis Dengan Memanfaatkan Media Kartu Huruf. *Pedagogik*, 7(2), 13–25. <http://ejournal.unkhair.ac.id/index.php/pedagigk/article/view/2685>
- Fachruddin, F. (2017). Pengembangan Daya Kreatif (Creative Power) Melalui Dunia Sekolah: Identifikasi Isu. *Sukma: Jurnal Pendidikan*, 1(1), 131–175. <https://doi.org/10.32533/01105.2017>
- Faizah, H., & Kamal, R. (2021). Peningkatan Kreativitas Siswa Pada Pembelajaran Tematik Menggunakan Pendekatan Project Based Learning. *Jurnal Basicedu*, 8(1), 466–467.
- Jannah, M., Prasajo, L. D., & Jerusalem, M. A.

- (2020). Elementary School Teachers' Perceptions of Digital Technology Based Learning in the 21st Century: Promoting Digital Technology as the Proponent Learning Tools. *Al Ibtida: Jurnal Pendidikan Guru MI*, 7(1), 1. <https://doi.org/10.24235/al.ibtida.snj.v7i1.6088>
- Masruri, E. M. H., & M. Misbah, M. M. (2023). Studi Literatur: Efektivitas Penerapan Project Based Learning (PjBL) dalam Pembelajaran Pendidikan Agama Islam dan Budi Pekerti Tingkat Sekolah Menengah Atas. *Jurnal Kependidikan*, 11(2), 301–317. <https://doi.org/10.24090/jk.v11i2.9297>
- Mega Farihatun, S., Pendidikan Ekonomi, J., & Ekonomi, F. (2019). Keefektifan Pembelajaran Project Based Learning (PjBL) Terhadap Peningkatan Kreativitas Dan Hasil Belajar. *Economic Education Analysis Journal*, 8(2), 635–651. <https://doi.org/10.15294/eeaj.v8i2.31499>
- Muqodas, I. (2015). Mengembangkan Kreativitas Siswa Sekolah Dasar. *Metodik Didaktik: Jurnal Pendidikan Ke-SD-An*, 9(2), 25–33. <https://ejournal.upi.edu/index.php/MetodikDidaktik/article/viewFile/3250/2264>
- Nugraha, Firosalia Kristin², I. A. (2018). Penerapan Model Pembelajaran Project Based Learning (PjBL) Untuk Meningkatkan Kreativitas dan Hasil Belajar IPA Pada Siswa Kelas 5 SD. *Kalam Cendekia Pgsd Kebumen*, 8(1), 165–175. <https://jurnal.fkip.uns.ac.id/index.php/pgsdkebumen/article/view/11961/8533>
- Pangestu, G. A., & Kurniawati, Y. (2019). Upaya Meningkatkan Kemampuan Imajinasi Sejarah Siswa Melalui Model Edutainment. *FACTUM: Jurnal Sejarah Dan Pendidikan Sejarah*, 8(2), 225–236. <https://doi.org/10.17509/factum.v8i2.22153>
- Pramudita, W., & Anugraheni, I. (2017). Studi Penguasaan Matematika Dan Bahasa Inggris Mahasiswa Program Studi Pendidikan Guru Sekolah Dasar (Pgsd). *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 7(1), 70. <https://doi.org/10.24246/j.scholaria.2017.v7i1.p70-82>
- Samsiadi, S., & Romelah, R. (2022). MODEL PROJECT BASED LEARNING (PjBL) DALAM PEMBELAJARAN PAIDI SMK NEGERI 1 BERAU KALTIM. *Research and Development Journal of Education*, 8(1), 363. <https://doi.org/10.30998/rdje.v8i1.12993>
- Wahyu, R. (2016). Implementasi Model Project Based Learning (PjBL) Ditinjau dari Penerapan Kurikulum 2013. *Teknosienza*, 1(1), 49–62.
- Widayanto, & Farida, A. (2022). Implementasi PjBL dalam Meningkatkan Karakter Pelajar Pancasila Materi Pembelajaran Pertumbuhan Makhhluk Hidup Siswa Kelas IIIB MI Sunan Muria Poncokusumo Kabupaten Malang. *Jurnal Perspektif*, 15(2), 227–235.
- Yusika, I., & Turdjai, T. (2021). PENERAPAN MODEL PEMBELAJARAN BERBASIS PROYEK (PjBL) UNTUK MENINGKATKAN KREATIVITAS SISWA. *Diadik: Jurnal Ilmiah Teknologi Pendidikan*, 11(1), 17–25. <https://doi.org/10.33369/diadik.v11i1.18365>