

Implementation Of Project-Based Learning To Support Merdeka Curriculum In Raudhatul Atfhal Dau

Implementasi Pembelajaran Berbasis Proyek untuk Mendukung Kurikulum Merdeka di Raudhatul Atfhal Dau.

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Abstract

Competencies that must be mastered by teachers include being able to apply learning models that are in accordance with the development of the educational curriculum. One of the learning models that supports the realization of kurikulum merdeka is a project-based learning model. Community service activities were carried out by involving Raudhatul Atfhal teachers of DAU District, stakeholders, and a team of experts as resource persons. The community service method used is the Community Based Research (CBR) method. The tools used in this activity are the RRA (Rapid Rural Appraisal) technique. The stages in this service activity refer to the CBR stages and are guided by the RRA technique. The activity partners are RA teachers in DAU District, but for the piloting project, the assistance is carried out on 21 representative teachers from all RAs in DAU District. The results of service activities showed an increase in understanding that was seen in the results of the initial survey, as many as 5 teachers (23.8%) expressed their agreement, and 7 teachers (33.3%) stated that they quite agreed that the implementation of the PjBL model must incur large costs and can only be applied optimally by institutions that have adequate facilities. Meanwhile, the results of the final survey showed an increase in understanding, especially related to the technical understanding of PjBL in terms of utilizing the surrounding environment to save the cost of toys. In fact, the assessment related to the benefits of the information presented showed that 90% of the participants strongly agreed with the average answer reaching 4.9. These results can be interpreted as participants feeling a lot of benefits to the implementation of activities. Teachers who originally considered the merdeka curriculum with the PjBL learning model were complicated activities.

Keywords: pjbl, kurikulum merdeka, raudhatul atfhal

Abstrak

Kompetensi yang harus dikuasai guru diantaranya mampu menerapkan model pembelajaran yang sesuai dengan perkembangan kurikulum pendidikan. Salah satu model pembelajaran yang mendukung terwujudnya kurikulum merdeka adalah model pembelajaran berbasis proyek atau project-based learning. Kegiatan pengabdian kepada masyarakat dilaksanakan dengan melibatkan guru-guru Raudhatul Atfhal Kecamatan DAU, stakeholder, dan tim ahli sebagai narasumber. Metode pengabdian masyarakat yang digunakan adalah metode Community Based Research (CBR). Tools yang digunakan dalam kegiatan ini adalah teknik RRA (Rapid Rural Appraisal). Tahapan dalam kegiatan pengabdian ini mengacu pada tahapan CBR dan berpedoman pada teknik RRA. Mitra kegiatan yakni guru-guru RA Kecamatan DAU, namun untuk piloting project pendampingan dilakukan pada 21 guru perwakilan dari seluruh RA di Kecamatan DAU. Hasil kegiatan pengabdian menunjukkan adanya peningkatan pemahaman yang tampak pada hasil survei awal sebanyak 5 guru (23.8%) menyatakan setuju, dan 7 guru (33.3%) menyatakan cukup setuju bahwa penerapan model PjBL harus mengeluarkan biaya yang besar dan hanya bisa diterapkan secara maksimal oleh lembaga yang memiliki fasilitas memadai. Sedangkan hasil survei akhir menunjukkan peningkatan pemahaman terutama terkait pemahaman teknis PjBL dalam hal pemanfaatan lingkungan sekitar untuk menghemat biaya bahan makanan. Bahkan penilaian terkait manfaat atas informasi yang dipresentasikan menunjukkan 90% peserta sangat setuju dengan rata-rata jawaban mencapai 4.9. Hasil tersebut dapat dimaknai, peserta merasakan kebermanfaatan yang banyak terhadap pelaksanaan kegiatan. Guru yang semula menganggap kurikulum merdeka dengan model pembelajaran PjBL merupakan aktivitas yang rumit.

Kata kunci: pjbl, kurikulum merdeka, raudhatul atfhal

1. PENDAHULUAN

Merdeka curriculum has become a current topic in the world of education in Indonesia (Sherly et al., 2020; Yusuf & Arfiansyah, 2021). Education levels ranging from Early Childhood Education to Higher Education are moving to start implementing of merdeka curriculum. These developments are very closely related to the development and needs of the quality of education output today. This is inseparable from the essence of education which is experiencing dynamic development in accordance with the changing times, the needs of science, technology and art (IPTEKS), and the competencies needed by the community. Every change in the world of education must be supported by improving the quality of human resources in the educational environment, especially teachers. The increased quality of teacher competence will have an impact on the creation of conducive, innovative learning, and the achievement of learning goals.

Competencies that must be mastered by teachers include being able to apply learning models that are in accordance with the development of the educational curriculum. One of the learning models that supports the realization of an merdeka curriculum is the project-based learning (PjBL) model. The project-based learning model is a learning that involves students in learning authentic themes, asking questions, improving hypotheses, seeking relevant information, planning investigations, collecting data, thinking critically, discussing, sharing ideas, reasoning and decision-making, developing products, and presenting them to the audience(Goldstein, 2016; Holm, 2011; Kokotsaki et al., 2016; Tobias, Campbell, 2015). The project-based learning model is a learning that involves students in learning authentic themes, asking questions, improving hypotheses, seeking relevant information, planning investigations, collecting data, thinking critically, discussing, sharing ideas, reasoning and decision-making, developing products, and presenting them to the audience.

In early childhood education, the project-based learning model provides great opportunities for children to develop all aspects of child development with fun learning conditions according to the child's choice. The output produced in this learning model is not only about children being able to read, write, and calculate (calistung) which has often been used as a prima donna in early childhood education in almost all regions of Indonesia. Completing and processing in a project not only requires the development of problem-solving skills and critical thinking skills, but students also process directly on real conditions in educational institutions according to the wisdom of the environment around the child (Cörvers et al., 2016; Cudney & Kanigolla, 2014; Smith, 2010), so that students can build knowledge, analyze, and get real experience in daily life.

This becomes more interesting if the project-based learning model can be applied in early childhood education institutions that have an environment with distinctive local wisdom. Children will have the opportunity to develop by getting to know more about the conditions of the surrounding environment. Children will grow not only competent in the academic field, but also by being able to become a whole person and useful for the surrounding environment in the future. However, all of these conditions will not be achieved if teachers as the main facilitator of the sustainability of learning activities in the institution, do not understand the concept of project-based learning for early childhood. The lack of understanding of the concept of project-based learning has an impact on the inability of teachers to implement appropriate project-based learning.

The results of observations and interviews with Raudhatul Atfhal (RA) teachers as one of the PAUD program units in DAU sub-district show that the majority of learning still uses Student Activity Sheets (LKS). Even though it has been packaged with play activities while learning, in this context students still spend more time sitting in class. This is a special concern, especially since the environmental conditions in DAU District have a very distinctive local wisdom. Data on (Badan Pusat Statistik, 2021) shows that DAU sub-district has a hilly village topography with very beautiful nature with citrus fruits as the main agricultural product, as well as most tourism in the form of agro-tourism. The results of the BPS data analysis also conveyed that the typical potential

of DAU District is still not optimally utilized by the surrounding community. One of the factors is the lack of introduction to the environmental potential of DAU sub-district since early childhood through learning that involves the potential of the surrounding environment.

This condition can be overcome, one of which is by introducing RA teachers to project-based learning in accordance with the environment around children. Teachers can become learning facilitators in RA by designing project-based learning stages that are able to explore children's knowledge about the child's environment according to the learning theme in RA. This will be supported by the characteristics of early childhood who easily absorb what the child hears, sees, and feels from the surrounding environment (Seefeldt & Wasik, 2008). Every teacher must understand the spirit of project-based learning, so that children will be really actively involved in learning, not just required to complete assignments. Therefore, mentoring activities are needed that aim to make teachers have competence in implementing project-based learning models in early childhood, especially in the Raudhatul Atfhal institution.

2. METODE

In the process of data mining, techniques (tools) are commonly used in participatory research. Data collection using techniques or instruments as tools aims to make the process easier and the results better, complete and systematic. The tools used in this activity are the RRA (Rapid Rural Appraisal) technique. COREMAP (2006) revealed that RRA is a data collection technique by studying the community participatively. With RRA, the service team can dig into the core of the problem and needs, and can obtain information from the first hand directly. RRA places assistance as the center of the process and service results. In its implementation, the community service program will use training methods, application, mentoring and evaluation monitoring. The stages in this service activity consist of several stages, including:

- a. Initial Mapping
- b. Build social communication
- c. Participatory mapping
- d. Problem formulation
- e. Preparation of program strategy
- f. Organizing assistance
- g. Implementing programs
- h. Reflection
- i. Program follow-up

Community service activities were carried out by involving 21 Raudhatul Atfhal teachers of DAU District, stakeholders, and a team of experts as resource persons. In this program, 2 RA institutions were also determined as pilot projects for the implementation of merdeka curriculum.

3. RESULT AND DISCUSSION

Service activities are carried out in stages, starting from initial mapping, preparation, followed by implementation. The results obtained at each stage are as follows.

- a. Initial Mapping

The initial mapping stage was carried out by the service team to obtain an initial overview of the condition of the assisted group. At this stage, the results were obtained, including: 1) DAU District has a very distinctive local wisdom. Data on (Badan Pusat Statistik, 2021) shows that DAU sub-district has a hilly village topography with very beautiful nature with citrus fruits as the main agricultural product, as well as most tourism in the form of agro-tourism. The results of the BPS data analysis also conveyed that the typical potential of DAU District is still not optimally utilized by the surrounding community. One of the factors is the lack of introduction to the environmental potential of DAU sub-district since early childhood

through learning that involves the potential of the surrounding environment. 2) The problem of the assisted group is the implementation of merdeka curriculum for RA.

b. Build social communication

The service team communicated with the prospective assistance group, namely representatives from RA teachers of Dau District. The teacher is the principal of RA Syihabuddin DAU and the compiler of merdeka curriculum at RA.

c. Participatory mapping

This stage was carried out after the launching and socialization of merdeka curriculum at RA. Participatory mapping consists of 4 stages using the RRA approach, including:

1) *Laying foundation.*

In the early stages, an agreement has been reached on how to change the behavior of Open Defecation Free (ODF). This is achieved through various Focus Group Discussion (FGD) activities, which consistently discuss the goals of service and divide the roles of each service team and partner group.



Figure 1. The service team coordinated with the chairman of the Raudhatul Afthal Teachers Association (IGRA) of DAU District and the headmaster of RA

2) Planning

Overall, at this stage, the service team obtained several findings that strengthened the initial observation that the needs of the assisted group, consisting of: a) Training to increase understanding related to the implementation of merdeka curriculum; b) Training to design the implementation of merdeka curriculum using the PjBL model; c) Assistance in the implementation of PjBL to support an merdeka curriculum based on local wisdom.

3) Information Gathering and Analysis

At this stage, the service team conducted interviews with 5 RA teachers in DAU District at random. The results of the interview show that service activities are expected to focus more on knowledge about merdeka curriculum and learning models that can be used.

4) Acting on Findings.

At this stage, the service team and partner groups began to determine the follow-up that must be carried out and what service activities are most appropriate for IGRA teachers in Dau District. The activities that will be carried out in the future have been agreed that the service team and the assistance group carry out the problem formulation stage.

d. Problem formulation

The results of the problem analysis obtained information that: 1) lack of understanding of RA teachers about the application of the project-based learning model for early childhood. 2) The majority of learning is still based on student worksheets. 3) The DAU District environment is still not optimally utilized in early childhood learning.

e. Preparation of program strategy

The form of service activities consists of: 1) Project-based learning training for early childhood; 2) Training on the integration of local wisdom through innovative project-based learning. In each activity, assistance was carried out as a form of follow-up to the activity.

f. Organizing assistance

At this stage, the service team and representatives of the assisted groups, in this case the Chairman of IGRA DAU District, held a discussion for the determination of working groups. The results of the discussion include: a) All teachers are involved in the implementation of the results of service; b) 2 institutions (RA Syihabuddin and RA Miftahul Jannah) are designated as pilot institutions for the implementation of PjBL in merdeka curriculum; c) Teacher representatives from each institution are required to attend seminars and training on the implementation of PjBL to support merdeka curriculum.

g. Implementing programs

1) Training Preparation

At this stage of preparation, the team also distributed questionnaires as an initial assessment related to the understanding of the trainees. The results of the questionnaire are as follows.

Table 1. Pre-Survey on the Implementation of PjBL in Merdeka Curriculum.

No	Statement	Mean
Understanding the Concept of PjBL		
1	PjBL is learning that is in accordance with students' interests	3.7
2	PjBL consists of the stages of preparation, implementation, and presentation (work title) of the product	3.7
3	PjBL must produce artifacts (products)	3.7
4	PjBL is able to keep students active	3.9
5	PjBL can involve all students	3.7
Technical understanding of PjBL in merdeka curriculum		
6	PjBL must be used for Implementation of Kurikulum Merdeka	4.0
7	PjBL can be done in just 1 day	3.5
8	Implementation of Kurikulum Merdeka assessments cannot be carried out if teachers use PjBL	3.5
9	PjBL can only be carried out by institutions with adequate facilities	3.0
10	PjBL has to incur large costs	3.7

Based on the presentation of the data, it appears that most teachers understand quite well related to the concept of PjBL but do not understand the technicalities related to the implementation of PjBL. This is proven by 2 teachers strongly agree (9.5%) and 14

teachers (66.8%) agree that PjBL is learning that is in accordance with students' interests. The results are in line with the opinion (Çabuk & Haktanir, 2010; Syafiqoh et al., 2023) that project learning is carried out on an ongoing basis to produce problem-solving products in accordance with children's interests (interests)..

The data was clarified by the results of the respondents related to the general stage statement of PjBL that the stages of PjBL consist of the stages of preparation, implementation, and presentation (work title) of the product. Of the 21 teachers (100%) of the respondents, it was shown that 2 teachers (9.5%) strongly agreed and 12 teachers (57.1%) strongly agreed. In the majority, as many as 14 teachers out of 21 teachers have understood the concept of the stages of implementing PjBL. Hamidah et al (2020) revealed that the stages of PjBL generally include 3 stages, namely: preparation, implementation, and presentation (work title) of the product.

However, the results related to the understanding of the concept are not in line with the understanding of the PjBL technique. Based on the data in table 1, it shows that more than 50% of teachers stated that PjBL must be used in merdeka curriculum in RA, even though PjBL is one of the choices of learning models that can be used in RA. It's just that PjBL is indeed the most often offered learning for the implementation of merdeka curriculum. This is inseparable from the opinion (Sari et al., 2023) that PjBL is one of the effective learning models used in merdeka curriculum with learning principles in accordance with student characteristics, so that fun learning is created.

The results of the respondents that showed a lack of understanding of the technical aspects of PjBL can be seen from the answers to the PjBL statement that they had to spend a lot of money. A total of 3 teachers (14.3%) expressed their agreement, 5 teachers (23.8%) agreed, and 7 teachers (33.3%) stated that the implementation of the PjBL model must incur large costs and can only be applied optimally by institutions that have adequate facilities. The fact in application and theoretically, PjBL can utilize items and toys from the surrounding environment, such as loose parts and toys that the institution already has.

2) Project-based learning training in merdeka curriculum for early childhood

This activity was carried out by involving experts (compilers of RA merdeka curriculum guidelines), namely Mrs. Antakuna Sholikhah, S.T, M.Pd. The stages of the event included: 1) Opening; 2) presentation of the concept of PjBL; 3) PjBL in merdeka curriculum. The seminar was held at RA Syihabuddin. The opening began at 08.30 WIB by the DAU RA Supervisor and the DAU.



Figure 2. Opening activities

A total of 22 teachers were present as representatives of each institution. This representative is expected to be an inspirational teacher who provides more information related to the implementation of PjBL in merdeka curriculum. The next activity is the core activity, the presentation of material on project-based learning in merdeka curriculum.



Figures 3 and 4. Technical explanation of training

The participants were very enthusiastic and listened very well, even when the presenter was about to end this session, many participants continued the discussion with the presenter until the specified time limit passed. Initially, the speaker asked questions related to the participants' initial understanding of merdeka curriculum in RA, the learning models used, especially the PjBL model, to the readiness of participants in implementing it in their respective institutions. The material provided was very interesting and very much answered the participants' anxiety about the implementation of merdeka curriculum in RA.

After the presentation of the material, the activity continued with the initial practice of the application of PjBL. On this occasion, the presenters and the service team performed a socio-drama as if the participants who attended were RA students who had to play with themes raised from the surrounding environment. However, based on discussions between teachers (resource persons and service teams) and students (training participants), it was agreed that the theme of PjBL raised was not agricultural products (oranges) but livestock (cows). Participants start working on each stage of PjBL.



Figure 5. Participants in the practice of implementing PjBL with Cattle Education Tourism Theme



Figure 6. Group 1 participants and their work

The final stage of project-based learning is the presentation of artifacts or works. At this stage, all groups present their work. The participants were very enthusiastic, even throughout the training there were no participants who were sleepy or complained of fatigue



Figure 7. Participants present their work

All participants did not leave the place before the instruction to rest or go home. From the beginning at 08.00 to 15.30 WIB, all participants were still complete. Even the principal of MI Syihabuddin participated in this activity. The activity ended at 15.30 WIB with the last agenda, namely questions and answers and discussions related to the participants' understanding of today's material. Even though the activity will end in the afternoon, many participants are still enthusiastic about continuing the discussion with the service team and expert resource persons. This shows that the interest and motivation of participants in this activity is very high.

- 3) Training on the integration of local wisdom through innovative project-based learning.

This activity started at 08.00 WIB then continued with the core material on the integration of local wisdom through innovative project-based learning through learning planning in the form of teaching modules. In its implementation, the integration of local wisdom in PjBL has been practiced in phase 1 training activities. However, on the basis of input from the presenter and analysis of the service team and the head of IGRA, in this activity 2 the participants were more focused on making teaching modules in accordance with the needs of merdeka curriculum learning planning. The teaching module in question must integrate local wisdom as a form of uniqueness of PjBL.

The next activity after the creation of the teaching module is the practice of making teaching modules as part of the learning plan that applies the PjBL model. However, during the practice activities, the service team and resource persons held discussions with participants who were still having difficulties.



Figure 8. Material Explanation

Participants not only practiced making teaching modules, but also presented the results of the teaching modules that had been designed. On this occasion, participants were also given time to convey difficulties or things that were not understood.



Figure 9. Participants presented the results of the design of the teaching module

The activity ended with a discussion and follow-up planning of service activities. Similar to stage 1, participants were still very enthusiastic until the end. Some even proposed that there be more activities on another day. This phase 2 activity ended with the distribution of questionnaires to find out the level of understanding of participants after the training was carried out. Results of the questionnaire as a material for the reflection stage.

h. Refleksi

At this stage, the team conducts evaluations related to service activities to the success of the activity. One of the bases for the achievement of the activity is the results of the final survey on the trainees. The results of the final survey showed an increase in understanding, especially related to the technical understanding of PjBL as follows.

Table 2. Post Survey on the Implementation of PjBL in the Merdeka Curriculum.

No	Statement	Mean
Understanding the Concept of PjBL		
1	PjBL is learning that is in accordance with students' interests	4.3
2	PjBL consists of the stages of preparation, implementation, and presentation (work title) of the product	4.2
3	PjBL must produce artifacts (products)	4.2
4	PjBL is able to keep students active	4.3
5	PjBL can involve all students	4.4
Technical understanding of Project-Based Learning within the Independent Curriculum.		
6	Technical understanding of PjBL in the implementation of kurikulum merdeka	1.8
7	PjBL can be done in just 1 day	1.9
8	Implementation of Kurikulum Merdeka assessments cannot be carried out if teachers use PjBL	1.8
9	PjBL can only be carried out by institutions with adequate facilities	1.8
10	PjBL has to incur large costs	1.6

Based on the results of the final survey, it shows that there is a change in understanding. Teachers originally considered merdeka curriculum with the PjBL learning model to be a complicated activity. However, after getting this training, teachers think otherwise, at the beginning of the implementation it is indeed necessary to adapt, but after that, PjBL is really helpful for teachers to be able to create fun learning for students while easing the teacher's task. This can be seen in the last 4 (four) indicators of the survey. A total of 19 teachers (90.5%) agreed that there is no need to spend a lot of money in implementing PjBL. In fact, the results of the initial survey show that there are still many teachers who have an understanding of the implementation of PjBL institutions, which must incur large costs. In the PjBL indicator, it can only be done by institutions with adequate facilities, and more than 60% have expressed their disapproval. This is certainly one of the concrete proofs of the achievement of the goals of the community service activities carried out. Providing the right understanding and teachers are able to apply PjBL to support the optimization of merdeka curriculum is the main goal of this activity.

Based on the results of the effectiveness survey, it shows that most of the participants are very interested in this activity. In fact, the assessment related to the benefits of the information presented showed that 90% of the participants strongly agreed with the average answer reaching 4.9. These results can be interpreted as participants feeling a lot of benefits to the implementation of activities. This is in accordance with the opinion Alromaih et al. (2022) that training related to PjBL is urgently needed by kindergarten teachers, especially in implementing more innovative early childhood learning.

i. Program follow-up

- 1) There is a follow-up to training activities by involving all RA teachers in DAU district. This activity has been carried out 2 weeks after the empowerment activity. On this occasion, the team collaborated with the KKRA Kec. DAU with the same resource persons as during the empowerment activity.
- 2) Each institution is required to get a pocket book on the application of PjBL in early childhood learning. This second follow-up is still in the process of printing a pocket book.
- 3) There is intensive guidance and assistance at the pilot project institution so that later it will become a reference for other institutions. This third sustainability plan is still under the guidance of the institution with intense discussions with the school.

4. CONCLUSION

This perpetuation program consists of several stages that ultimately result in a change in the level of understanding of participants towards the application of PjBL based on local wisdom to support merdeka curriculum. The increase in understanding was seen in the results of the initial survey as many as 3 teachers (14.3%) expressed their strong agreement, 5 teachers (23.8%) expressed their agreement, and 7 teachers (33.3%) stated that they quite agreed that the implementation of the PjBL model must incur large costs and can only be applied optimally by institutions that have adequate facilities. Meanwhile, the results of the final survey showed an increase in understanding, especially related to the technical understanding of PjBL in terms of utilizing the surrounding environment to save the cost of toys. In fact, the assessment related to the benefits of the information presented showed that 90% of the participants strongly agreed with the average answer reaching 4.9. These results can be interpreted as participants feeling a lot of benefits to the implementation of activities. Teachers who originally considered merdeka curriculum with the PjBL learning model were complicated activities. However, after getting this training, teachers think otherwise, at the beginning of the implementation it is indeed necessary to adapt, but after that PjBL is really helpful for teachers to be able to create fun learning for students while easing the teacher's task.

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BIBLIOGRAPHY

Alromaih, M. A., Elsayed, S. A., & Alibraheim, E. A. (2022). Study of Project-Based Learning to Improve the Instructional Design Process of Pre-service Early Childhood Teachers. *International Journal of Information and Education Technology*, 12(12), 1381-1389. <https://doi.org/10.18178/ijiet.2022.12.12.1762>

Badan Pusat Statistik. (2021). *Kecamatan DAU dalam Angka*. Badan Pusat Statistik Kabupaten Malang.

Çabuk, B., & Haktanır, G. (2010). What should be learned in Kindergarten? A project approach example. *Procedia - Social and Behavioral Sciences*, 2(2), 2550-2555. <https://doi.org/10.1016/j.sbspro.2010.03.371>

Cörvers, R., Wiek, A., Kraker, J. De, Lang, D. J., & Martens, P. (2016). *Problem-Based and Project-Based Learning for Sustainable Development*. 349-358. <https://doi.org/10.1007/978-94-017-7242-6>

Cudney, E., & Kanigolla, D. (2014). *Measuring the Impact of Project-Based Learning in Six Sigma Education*. March 2015, 37-41. <https://doi.org/10.1080/19488289.2014.930546>

Goldstein, O. (2016). Teacher Education & Development | Research Article A project-based learning approach to teaching physics for pre-service elementary school teacher education students. *Cogent Education*, 1-12. <https://doi.org/10.1080/2331186X.2016.1200833>

Hamidah, H., Rabbani, T. A. S., Fauziah, S., Puspita, R. A., Gasalba, reski A., & Nirwansyah. (2020). *Hots-oriented module: project based learning*.

Holm, M. (2011). PROJECT-BASED INSTRUCTION : A Review of the Literature on Effectiveness in Prekindergarten through 12th Grade Classrooms. *Rivier Academic Journal*, 7(2), 1-13.

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). *Improving Schools Project-based learning : A review of the literature*. <https://doi.org/10.1177/1365480216659733>

Sari, A. M., Suryana, D., Bentri, A., & Ridwan, R. (2023). Efektifitas Project Based Learning dalam Implementasi Kurikulum Merdeka di TK. *Jurnal Basicedu*, 7(1). <https://doi.org/10.31040/basicedu.v7i1-4390>

Seefeldt, C., & Wasik, B. A. (2008). *Early education: Three-, four-, and five-year-olds go to school* (S. Darwin (ed.); Second). Pearson Education, Inc.

Sherly, Dharma, E., & Sihombing, H. B. (2020). Merdeka belajar: kajian literatur. *UrbanGreen Conference Proceeding Library*, 1.

Smith, R. K. (2010). *Journal of Teaching in International Business A Case Study in Project-Based Learning : An International Partnership A Case Study in Project-Based Learning : October 2014*, 37-41. <https://doi.org/10.1080/08975930.2010.504464>

Syafiqoh, I., Utanto, Y., & Setiawan, D. (2023). Adaptasi Kurikulum Taman Kanak-kanak Penggerak: Sebuah Strategi dari Daerah Pesisir. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(1). <https://doi.org/10.31004/obsesi.v7i1.4043>

T.P COREMAP. (2006). *Panduan Pengambilan Data dengan Metode Rapid Rural Appraisal (RRA) dan Participatory Rural Appraisal (PRA)* (2nd ed.). Departemen Kelautan dan Perikanan.

Tobias, Campbell, G. (2015). *Bringing Curriculum to Life Enacting Project-Based Learning in Music Programs*. 39-47. <https://doi.org/10.1177/0027432115607602>

Yusuf, M., & Arfiansyah, W. (2021). Konsep "Merdeka Belajar" dalam Pandangan Filsafat Konstruktivisme. *AL-MURABBI: Jurnal Studi Kependidikan Dan Keislaman*, 7(2). <https://doi.org/10.53627/jam.v7i2.3996>.