

Management of Project-Based Learning Model at Sekolah Alam Junior High School

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Abstract

The purpose of this research is to learn more about how project-based learning models are planned, implemented, and evaluated at *Sekolah Alam Cikeas Junior High School*. This study employed a descriptive method and a qualitative approach. Observation, interviews, and documentation studies were used to gather data. This research shows that the management of project-based learning environmental education programs is carried out by the *Sekolah Alam Cikeas Junior High School* very well. The quality of the learning implementation has exceeded the quality of the implementation of environmentally sound learning when compared to other schools. The implementation of Project-Based Learning at *Sekolah Alam Cikeas Junior High School*, which focuses on character and moral development, will produce students who can compete in academics and overall quality. Management that has been done in an organised manner makes Project Based Learning implemented in a more measured manner and produces output as expected without wasting existing resources.

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui lebih jauh bagaimana model pembelajaran berbasis proyek direncanakan, dilaksanakan, dan dievaluasi di SMP Sekolah Alam Cikeas. Penelitian ini menggunakan metode deskriptif dan pendekatan kualitatif. Observasi, wawancara, dan studi dokumentasi digunakan untuk mengumpulkan data. Temuan penelitian ini menunjukkan bahwa pengelolaan program pendidikan lingkungan pembelajaran berbasis proyek yang dilakukan oleh SMP Sekolah Alam Cikeas sangat baik. Kualitas pelaksanaan pembelajaran telah melebihi kualitas pelaksanaan pembelajaran yang berwawasan lingkungan jika dibandingkan dengan sekolah lain. Dengan diterapkannya *Project-Based Learning* di SMP Sekolah Alam Cikeas yang menitikberatkan pada pengembangan karakter dan moral akan menghasilkan siswa yang mampu bersaing tidak hanya di bidang akademik tetapi juga secara kualitas secara keseluruhan. Pengelolaan yang telah dilakukan secara terorganisir, menjadikan *Project-Based Learning* dilaksanakan secara lebih terukur dan menghasilkan output sesuai yang diharapkan tanpa membuang sumber daya yang ada.

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INTRODUCTION

In the era of industrial revolution 4.0, education is increasingly considered the best solution to prepare students to become human beings ready to work and even compete between individuals. Education is carried out in the form of learning in schools. Learning is an educator's effort to realise the process of acquiring knowledge, mastery, proficiency, and the formation of attitudes and beliefs in students (Hanafy, 2014). The success of learning in the classroom is the key to the success of the educational process. At this time, a more meaningful learning process is needed. Learning is about memorising information and can give students a deep impression of the learning process to enjoy learning. The learning process is used to make it more meaningful, starting from asking challenging questions about a phenomenon, then assigning students to carry out an activity, focusing on gathering and using evidence, not just delivering information directly and emphasising rote memorisation.

One learning model that can support this is project-based learning. Project-Based Learning (PBL) is a learning approach that gives students the freedom to plan learning activities, carry out projects collaboratively, and ultimately produce work products presented to others. Thomas on Bilqis explained that a project is characterised as a series of complex activities based on challenges faced by students, completed over a set length of time, and culminating in realistic outputs such as a presentation, exhibition, or publication (Darini Bilqis Maulany, 2013). Brundiers et al. in Guo et al. stated that project-based learning refers to an inquiry-based teaching technique that involves students constructing knowledge by requiring them to complete meaningful projects and create real-world products (Guo et al., 2020).

Project-based learning models are implemented to work more autonomously, develop their learning, be more realistic, and produce a product. Al-Tabany explains that project-based learning is innovative learning centred on students (student-centred) and assigns teachers as motivators and facilitators, where students are allowed to work autonomously in constructing their Learning (Al-Tabany 2014). It means that the involvement of students in this learning model is required to be more than the teacher itself. Loyens et al. also explained that PBL is a cooperative and research-based learning approach that emphasises active student participation and comparative Learning (Loyens et al., 2015). The aim of PBL is for participants to work together to achieve a common goal. Students may experience problems while working on a project that must be resolved to create and present the final product in response to the driving problem (Kokotsaki et al., 2016). From some of these statements, it can be concluded that project-based learning is learning that focuses on the activities of students to be able to understand concepts and principles by conducting in-depth research on a problem and looking for relevant solutions and students learning independently and the results of this learning is a product. In addition, Bell and Han et al. in Aksela and Haatainen state that PBL has much potential for improving 21st-century abilities and involving students in real-world problems (Aksel & Haatainen, 2019).

Project-Based Learning can also be carried out easily but with very satisfying results (Wajdi, 2017) and can increase students' creativity (Safriana 2018). It means that Project Based Learning is a learning model with many advantages for students, teachers and schools. Even Häkkinen in Almulla explains that the PBL approach promotes strategic thinking, problem-solving, interpersonal communication, information and media literacy, collaboration, leadership and teamwork, innovation, and imagination, all of which are essential 21st-century skills (Almulla, 2020). Based on some of the research results, the researcher can conclude that project-based learning is carried out so that students learn from their experiences and then apply them in everyday life. This model can

improve student learning outcomes because they will increase their own knowledge involved in a complex learning process.

One school that applies this project-based learning model is Sekolah Alam Cikeas at the junior high school level. The observations made there show that the project-based learning model in this school is carried out based on internal school research to students of Sekolah Alam Cikeas Junior High School so that this program can meet the learning needs according to the needs of the students. *Sekolah Alam Cikeas* organises three types of project-based learning programs: 1) Local Project-Based Learning Program, 2) National Project-Based Learning Program, and 3) International Project-Based Learning Program. From the observations made, it was also known that during this program, the school felt that there were many developments in students' attitudes, especially seen from their interaction patterns with the social conditions around them. Their interaction patterns with peers and older people, but this program greatly impacts their interactions with the natural environment.

Sekolah Alam itself is one form of alternative education that uses nature as the primary medium of learning. This school can be an alternative to ordinary schools that can bring children more creativity, dare express their desires, and direct children to positive things (Santoso 2010). In other words, the *Sekolah Alam* comes with its uniqueness compared to ordinary schools in general, where the nature school directs each of its learning activities directly related to nature. *Sekolah Alam* was also founded in response to flaws and discontent with Indonesia's educational system (Setiawati et al., 2019). As a school of nature, the school landscape is the heart of the school—one with the spirit of school and harmony with nature (Ledonovo, 2009). The education process in the natural school pays close attention to the potential of each individual, the freedom to actualise oneself according to their creativity to create a pleasant learning atmosphere.

Based on some previous background, researchers decided to research the Project-Based Learning Management Model in *Sekolah Alam Cikeas* because the combination of the Nature-based school model is mixed and matched with the project-based learning model. This is a combination that is very well implemented for the academic development and social abilities of students. It is hoped that the results of this research will positively impact other schools that are also implementing a project-based learning model.

METHODS

This research is descriptive qualitative research, a research approach where the results are data. The data was collected in various ways: observation; interview, document digest; tape record. The data is processed through recording and presented in explanations arranged into an expanded text based on analysis to reveal the social situation under study. Because the approach used in this research is qualitative, the data will be presented in a narrative form.

This research was conducted at *Sekolah Alam Cikeas* at the junior high school level for approximately ten months. In data collection, researchers need data sources from parties directly involved with the topics discussed in the study. With a qualitative approach, data sources were obtained from informants as information givers. The informants in this study were the Principal, Head of the Education Division, teaching teachers, and parents/guardians of students. Also, the results of the researchers' observation notes and supporting documents were the sources of the data in this study. Key informants are the Principal and Head of the Education Division. Meanwhile, the supporting informants are the program teachers and parents/guardians of the students.

Data collection in this study was carried out by considering the effect of data on the quality of research results. Researchers will note every data collection process as an essential source of research information. Some of the data collection techniques that the researcher will implement are: 1) Observation; 2) Interview; 3) Documentation Study. Qualitative analysis is a research procedure that produces descriptive data in written and spoken words from people and observed behaviour (Moleong, 2007).

FINDINGS AND DISCUSSION

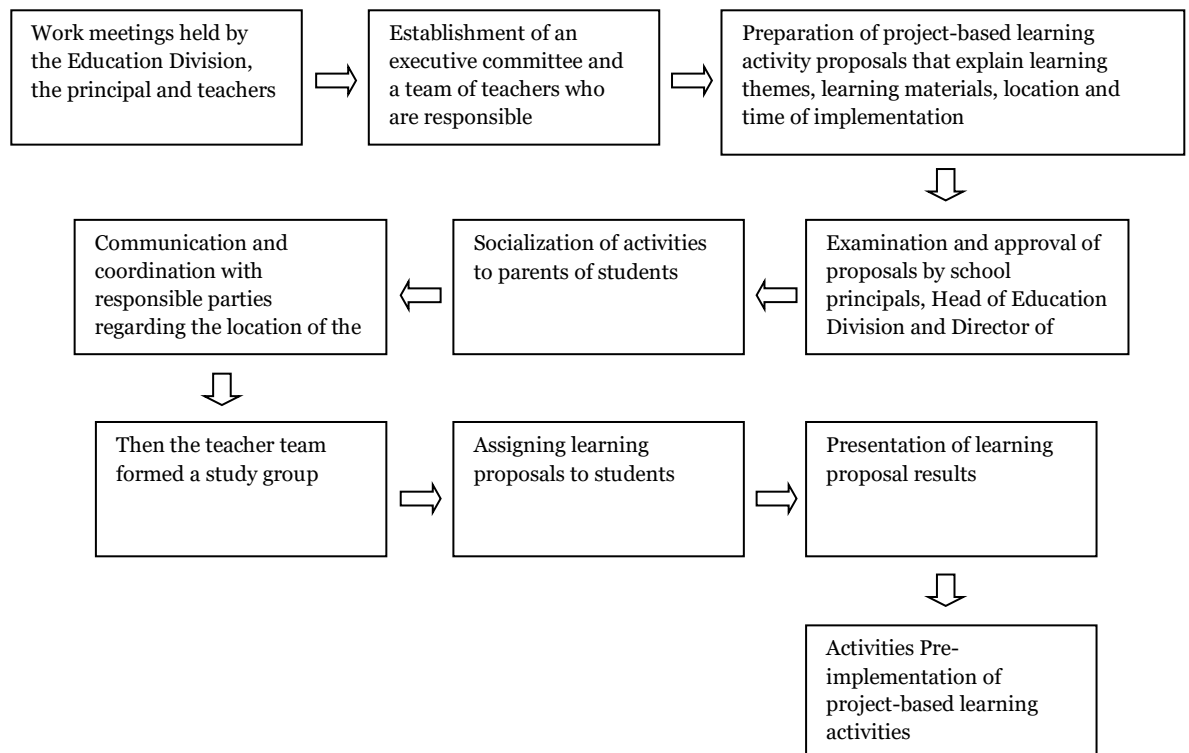
Based on the results of research conducted starting from observations or observations, interviews, and documentation studies. The researcher adjusted the research findings based on the research sub-focus with the existing theoretical justification, as follows:

Project Based Learning Model Planning at Sekolah Alam Cikeas

Project-based learning planning carried out by *Sekolah Alam Cikeas Junior High School* begins with a planning meeting. It is essential to determine the things needed starting from analysing the learning curriculum, analysing the needs of students, determining activities that support project-based learning programs. This is very well done and is in line with what Griffith said in Too et al., which states that more work put into pre-project planning leads to better cost, schedule, and operational qualities (Too et al., 2017). In planning this project-based Learning, *Sekolah Alam Cikeas Junior High School* declared the aim of learning to create students who have a noble character, scientific logic, leadership, entrepreneurship, and good national insight. This is in line with the theory of Ridhotullah, which states that planning as the selection of a set of activities and the subsequent decisions of what to do, when, how, and by anyone (Ridhotullah, 2015). This is also in line with what Jeseviciute-Ufartiene said that planning is one of an organisation's management functions, and it is the primary function of management (Jeseviciute-Ufartiene, 2014).

Furthermore, project-based learning planning is carried out by integrating content and learning skills which are essential components of project-based learning and are identified in project results. Students need to learn, practice, apply and expand these skills as part of project design. In implementing the planning, *Sekolah Alam Cikeas Junior High School* pays attention to the planning process as a rational and systematic thought process about what to do, how to do it, when to do it, and who will carry out an activity that is carried out to improve quality. So that the activation process can take place effectively, efficiently, and productively and meet the demands and needs of the community.

The planning process for project-based Learning at *Sekolah Alam Cikeas Junior High School* is carried out in several stages, namely:



The learning planning process carried out by the *Sekolah Alam Cikeas* Junior High School is by the theory put forward by Lukman Hakim and Mukhtar, which is explained that the core activities in the planning process are the essential parts that cannot be overlooked by those who are responsible for managing the implementation of education and learning in which activities include: 1) Forecasting; 2) Goal Setting; 3) Programming; 4) Scheduling; 5) Budgeting; 6) Development of Procedures and; 7) Determination and Interpretation of Policy (Hakim and Mukhtar, 2018). Organising is the process of determining, grouping, and arranging the kinds of activities needed to achieve goals, assigning people (staff) to these activities, providing physical factors suitable for the environment (work needs), and assigning delegated authority relations for everyone associated with the implementation of each expected activity (Marno and Supriyatno, 2008).

Implementation of Project-Based Learning Management Model in Sekolah Alam Cikeas

Project-based learning activities for class VII are implemented in two semesters at Sekolah Alam Cikeas Junior High School. It will be held on Tidung Kecil Island, Thousand Islands, DKI Jakarta, in the first semester. Whereas in the second-semester students carry out activities at the Sentul Recycle Center, Bogor, West Java. The theme of project-based learning in grade VII is knowledge about environmental conservation, fish farming, waste management, processing, and observation with the surrounding community.

As for class VIII, project-based learning activities are implemented in the first semester in Bukit Barisan Selatan National Park, Lampung, South Sumatra. The theme of project-based learning in class VIII is the conservation of rare animals, plant and plant vegetation, variations of the TNBBS and typical of BBSNP, and observations of local tribes. In the second semester, the learning agenda related to project-based learning was the implementation of learning outcomes while in BBSNP through observation of the surrounding environment and presentation of the results of the observations.

For class IX, project-based learning activities are implemented in the first semester in Japan, namely in three cities as mandatory destinations, namely Osaka, Kyoto, and Tokyo or Kamikatsu. The theme of project-based learning in class IX is environmental management, waste management, traditional and modern cultivation techniques, and local community observation. In the second semester, the learning agenda related to project-based learning is the implementation of learning outcomes while in Japan through observing the surrounding environment and presenting the results of the observations.

Implementation means providing directions and determining the direction that the executors of operational activities must take. According to Machalli and Hidayat, movement includes leadership, motivation, communication, and other forms to influence someone to achieve organisational goals (Machali and Hidayat 2016). Baharudin explained that actuating is the relationship between individual aspects caused by a relationship with subordinates to understand and understand the effective and efficient division of work. Implementation is an essential part of the management process. Unlike the three other functions (planning, organising, controlling), actuating is considered the essence of management because it deals specifically with people (Kristiawan, Safitri, and Lestari, 2017). It means that implementation is the essence of a management activity where all things carried out in planning are carried out during this implementation.

Implementation is based on the planning and organising stages that have been predetermined. The briefing is carried out by the delegation flow determined and regulated in the learning activity proposal, which becomes the regulatory reference in the implementation of all project-based learning activities at Sekolah Alam Cikeas Junior High School, which applies to facilitators and students. The learning implementation is as the planning outlined in the proposal for project-based

learning activities. The activity calendar is adjusted to the person in charge based on the organisation that has been done. After that, it will be applied by the implementation instructions. The implementation of educational learning will also be supervised by the principal and head of the *Sekolah Alam Cikeas*.

Evaluation of Project-Based Learning Learning Model Management at Sekolah Alam Cikeas

The learning evaluation process carried out by the *Sekolah Alam Cikeas* Junior High School is in line with the theory. It explains that reflection activities on the work results of students who have worked on projects in a way, they are directed to present their work and the experiences they have gained during project work both individually and in groups. Feedback is also carried out on the processes and products produced (Priansa, 2017). Evaluation is carried out as a measure of achievement that has been carried out by students so that the school can assess the development of students every year. The OECD in Zidane defines evaluation as a systematic and objective examination of a project, program, or policy, its design, execution, and outcomes, whether it is continuing or concluded (Zidane et al., 2015). There are also advantages to carrying out evaluations related to the curriculum, namely: the curriculum that is evaluated will find problems that occur in Learning (Andrian et al., 2018).

Evaluation of project-based Learning is carried out before the implementation, during the implementation of learning, and after the implementation of learning. The evaluation that was carried out before implementing the activity was evaluation related to the assessment of student learning proposals, assessment of proposal presentations, and assessment of Pre PBL activities. Meanwhile, the evaluation carried out during the implementation was in the form of a verbal evaluation which was carried out verbally every day by each mentor in each group, and an evaluation of the achievement of the agenda. The last evaluation activity is carried out after implementing learning activities through activity evaluation meetings by management and teachers, then the assignment of learning outcomes reports to students, the assessment of the presentation of learning outcomes reports. In this final evaluation stage, a typical PBL report card was handed over to the parents of students and a program questionnaire from the school to the students' parents.

Project-based learning provides results in knowledge, skills (skills or psychomotor), and attitudes (attitude or affective). Therefore, teachers who teach project-based learning must carry out evaluations that accommodate the evaluation of these aspects. Sakni explained that evaluation means planned activities to find out the state of an object using instruments, and the results are compared with certain benchmarks to obtain conclusions (Widiyanto 2018). Also, evaluation is essentially a process of making decisions about the value of an object. A value judgment is based on measurement results (quantitative description) and observations (qualitative description). Which is based on measurement results and not on measurement results (non-measurement), ultimately results in a value decision about an object being assessed.

The purpose of evaluation has two functions, namely, a formative function and a summative function. The formative function, namely evaluation, improves and develops ongoing activities (programs, people, products, etc.). In contrast, the summative function, namely evaluation, is used for accountability, information, selection, or follow-up. In other words, evaluation aims to assist development, implementation of program needs, program improvement, accountability, selection, motivation, increasing knowledge, and support from those involved (Ananda and Rafida 2017).

Each stage in managing project-based Learning at *Sekolah Alam Cikeas* Junior High School has an attachment to one another. In general, the project-based learning management system has been very good in supporting the achievement of goals and achievements that have been targeted

and planned. Based on this discussion, it was found that several main points were the advantages in the management of the project-based learning model at Sekolah Alam Cikeas Junior High School, including:

1. A curriculum system integrating four aspects of moral development, logic, leadership, national insight, and entrepreneurship in each learning pattern is a distinct advantage for Sekolah Alam Cikeas Junior High School.
2. The learning management process has been running consistently but still being flexible following the development needs and conditions of the school and students. The system is flexible and tends to be easily adapted by the parties concerned.
3. The process of planning, organising, directing, implementing, and controlling has been running regularly by the patterns and directions that have been mutually agreed upon by all levels of school management.
4. The pattern of education by prioritising the development of students' morals and character is an added value for Sekolah Alam Cikeas Junior High School to increase competitiveness with other schools because not all schools currently have a commitment to prioritising the development of children's character and morals rather than just concerned with developing aspects intelligence or logic alone.
5. Educational programs are organised into periodic programs ranging from annual, semester, monthly, weekly, and daily. This is an added value for Sekolah Alam Cikeas Junior High School. It can plan educational programs ranging from the long, medium, and short term in detail, direction, and continuity so that its implementation can be more controlled according to the planning of each program.

CONCLUSION

Management of project-based learning environmental education programs is carried out by the *Sekolah Alam Cikeas Junior High School*. The quality of the implementation of learning has exceeded the quality of the implementation of environmentally sound learning compared to other schools. By organising environmental education programs based on project-based learning, schools can shape all aspects needed to develop students, such as aspects of knowledge, skills, and attitudes. Implementing Project-Based Learning at Sekolah Alam Cikeas Junior High School, which focuses on character and moral development, will produce students who can compete in academics and overall quality. Management that has been done in an organised manner make Project Based Learning implemented in a more measured manner and produce output as expected without wasting existing resources.

Based on this research, every school is encouraged to implement a project-based learning model. This is mainly for *Sekolah Alam Cikeas* to maintain and develop a project-based learning model to shape students' character and develop academic performance non-academic potential based on the respective objective schools. There are many limitations in this study because this research was conducted during a pandemic. Researchers hope that later other researchers who take similar topics will be more able to develop research studies than those studied using different research methods and techniques to broaden readers' insights, especially regarding project-based learning model management.

REFERENCES

- Aksel, M., & Haatainen, O. (2019). Project-Based Learning (Pbl) In Practise: Active Teachers' Views Of Its' Advantages And Challenges. *Integrated Education for the Real World*.
- Al-Tabany, T. B. (2014). *Mendesain Model Pembelajaran Inovatif, Progresif dan Kontekstual: Konsep, Landasan, dan Implementasinya pada Kurikulum 2013 (Kurikulum Tematik Integratif)*. Jakarta: Kencana.
- Almulla, M. A. (2020). The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to

- Engage Students in Learning. *SAGE Open*. <https://doi.org/10.1177/2158244020938702>
- Ananda, R., & Rafida, T. (2017). *Pengantar Evaluasi Program Pendidikan*. Medan: Perdana Publishing.
- Andrian, D., Kartowagiran, B., & Hadi, S. (2018). The instrument development to evaluate local curriculum in Indonesia. *International Journal of Instruction*. <https://doi.org/10.12973/iji.2018.11458a>
- Darini Bilqis Maulany. (2013). The Use Of Project-Based Learning In Improving The Students` Speaking Skill (A Classroom Action Research at One of Primary Schools in Bandung). *Journal of English and Education*.
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International Journal of Educational Research*. <https://doi.org/10.1016/j.ijer.2020.101586>
- Hakim, L., & Mukhtar. (2018). *Dasar-dasar Manajemen Pendidikan*. Jambi: Timur Laut Aksara.
- Hanafy, M. S. (2014). Konsep Belajar Dan Pembelajaran. *Lentera Pendidikan : Jurnal Ilmu Tarbiyah Dan Keguruan*. <https://doi.org/10.24252/lp.2014v17n1a5>
- Jeseviciute-Ufartiene, L. (2014). Importance of Planning in Management Developing Organization. *Journal of Advanced Management Science*. <https://doi.org/10.12720/joams.2.3.176-180>
- Kokotsaki, D., Menzies, V., & Wiggins. (2016). Project-based Learning: A review of the literature. Improving Schools. *Durham Research Online*.
- Kristiawan, M., Safitri, D., & Lestari, R. (2017). *Manajemen Pendidikan*. Yogyakarta: Deepublish Publisher.
- Ledonovo, S. (2009). *Sebuah Novel Tentang Dia. Penggagas Sekolah Alam*. Bogor: SoU Publisher.
- Loyens, S. M. M., Jones, S. H., Mikkers, J., & van Gog, T. (2015). Problem-based learning as a facilitator of conceptual change. *Learning and Instruction*. <https://doi.org/10.1016/j.learninstruc.2015.03.002>
- Machali, I., & Hidayat, A. (2016). *The Handbook of Education Management: Teori dan Praktik Pengelolaan Sekolah/Madrasah di Indonesia*. Jakarta: Prenamedia Group.
- Marno, & Supriyatno, T. (2008). *Manajemen dan Kepemimpinan Pendidikan Islam*. Bandung: Refika Aditama.
- Moleong, L. (2007). *Metodologi Penelitian Kualitatif. Edisi Revisi*. Bandung: PT Remaja Rosdakarya.
- Priansa, D. J. (2017). *Pengembangan Strategi dan Model Pembelajaran*. Bandung: 402354:Anggota IKAPI Jawa Barat.
- Ridhotullah, S. (2015). *Pengantar Manajemen*. Jakarta: Prestasi Pustaka.
- Safriana. (2018). Penerapan Project Based Learning dalam Upaya Meningkatkan Kreativitas Mahasiswa Calon Guru. *Serambi Akademica*, 6(1), 12-13. <https://ojs.serambimekkah.ac.id/index.php/serambi-akademika/article/download/613/560>.
- Santoso, S. B. (2010). *Sekolah Alternatif, Mengapa Tidak?* Yogyakarta: Dia Press.
- Too, E., Le, T., & Yap, W. Y. (2017). Front-end planning - The role of project governance and its impact on scope change management. *International Journal of Technology*. <https://doi.org/10.14716/ijtech.v8i6.708>
- Wajdi, F. (2017). Implementasi Project Based Learning (Pbl) Dan Penilaian Autentik Dalam Pembelajaran Drama Indonesia. *Jurnal Pendidikan Bahasa Dan Sastra*. https://doi.org/10.17509/bs_jpbs.v17i1.6960
- Widiyanto, J. (2018). *Evaluasi Pembelajaran*. Madiun: UNIPMA Press.
- Zidane, Y. J. T., Johansen, A., & Ekambaram, A. (2015). Project Evaluation Holistic Framework - Application on Megaproject Case. *Procedia Computer Science*. <https://doi.org/10.1016/j.procs.2015.08.532>