

## COMPARISON OF REFLECTIVE THINKING THROUGH PROJECT BASED LEARNING AND DIFFERENTIATED LEARNING IN ISLAMIC RELIGIOUS EDUCATION BASED ON MINANGKABAU ETHNOGRAPHY

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**Abstrak:** Rendahnya kemampuan berpikir reflektif dan kurangnya pemahaman peserta didik terhadap nilai-nilai lokal dalam pembelajaran Pendidikan Agama Islam menjadi permasalahan di Sekolah Menengah Atas Negeri 1 Lintau. Pembelajaran yang bersifat teoritis membuat peserta didik kesulitan mengaitkan ajaran agama dengan budaya etnografi Keminangkabauan. Penelitian ini bertujuan untuk membandingkan efektivitas model pembelajaran berbasis proyek dan model pembelajaran berdiferensiasi dalam meningkatkan kemampuan berpikir reflektif peserta didik pada materi Pendidikan Agama Islam terintegrasi etnografi Keminangkabauan. Penelitian menggunakan pendekatan kuantitatif komparatif melalui eksperimen dengan melibatkan 158 peserta didik dan 4 pendidik. Data dikumpulkan melalui angket dan wawancara. Hasil penelitian menunjukkan bahwa model pembelajaran berdiferensiasi lebih optimal dalam meningkatkan kesadaran diri, refleksi dalam tindakan, dan perencanaan masa depan. Sementara itu, model berbasis proyek lebih unggul dalam membangun refleksi sosial. Temuan ini menunjukkan pentingnya pemilihan model pembelajaran yang sesuai untuk mengembangkan kemampuan reflektif dan memperkuat pemahaman nilai-nilai lokal, sehingga pembelajaran Pendidikan Agama Islam menjadi lebih bermakna dan kontekstual.

**Kata Kunci:** Project Based Learning, Diferensiasi Learning, Reflektif

**Abstract:** Low reflective thinking skills and a lack of understanding of local values among students in Islamic Religious Education are problems at State Senior High School 1 Lintau. Theoretical learning makes it difficult for students to relate religious teachings to the ethnographic culture of Minangkabau. This study aims to compare the effectiveness of project-based learning and differentiated learning models in improving students' reflective thinking skills in integrated Islamic Education lessons incorporating Keminangkabau ethnography. The study used a quantitative comparative approach through an experiment involving 158 students and 4 educators. Data were collected through questionnaires and interviews. The results indicate that the differentiated learning model is more effective in enhancing self-awareness, reflection in action, and future planning. Meanwhile, the project-based model is superior in fostering social reflection. These findings highlight the importance of selecting appropriate learning models to develop reflective skills and strengthen understanding of local values, thereby making Islamic Education more meaningful and contextual.

**Keywords:** Project Based Learning, Differentiated Learning, Reflective

## INTRODUCTION

The education program in Indonesia develops relevantly in accordance with the government program that manages it (Lestari et al., 2023). Independent curriculum programs in schools are developed autonomously and flexibly by educational units by considering various common issues that occur realistically based on needs (Efendi & Murhayati, 2022). Common Issues that are used consider the applicable policies and are relevant to the need analysis, vision, mission, goals and strategies of the school (Allutfia & Setyaningsih, 2023). The principle of developing an independent curriculum shows the distinctiveness of the social context of character and environment of students who are relevant to the world of work, the times, paying attention to the urgency of the material, Islamic religious capendidian, evaluation techniques and follow-up (Baharuddin, 2021) in (Ali Mursyid et al., 2023). Researchers note that the independent curriculum requires the presence of learning themes that are integrated with the local lives of students.

Given the many abstract concepts that students must master, the role of educators is very important in creating various media, teaching aids, or learning resources to support understanding into meaningful experiences, instill systematic values in logical and analytical thinking through the use of concrete media and sources, so that learning objectives can be achieved optimally. (Safrizal et al., 2022). The phenomenon that often occurs is in Islamic Religious Education learning which is dominated by aspects of concepts and memorization of concepts. Learners need reasoning using more concrete themes,

relevant examples that can even be found in life. From the explanation above, it can be analyzed that from the normative aspect of learning Islamic religious education which is rather narrow, it produces an assumption that it does not need to be criticized and analyzed in depth, because it has been compiled by curriculum experts and Islamic religious material experts in accordance with the policies of the Ministry of Education and Culture, because it already covers all aspects of Islamic teachings.

Researchers identified Minangkabau ethnographic themes that are relevant to the elements of Islamic religious education. The ethnographic aspects of Minangkabau consist of philosophical values, cultural heritage and figures. Researchers conducted literature studies using Minangkabau socio-cultural books entitled Adat Minangkabau (Pattern of Minang People's Life Purpose) by Amri MS, Minangkabau in A Shuttle by Afandi Arya, and Minang Kabau natural culture textbooks. Islamic religious education educators conduct field studies to find cultural heritage locations that are relevant to the elements of Islamic religious education. Selection of cultural heritage by considering ease of access, cost and time efficiency so as not to interfere with the learning process. Researchers conducted interviews with Islamic Religious Education educators at SMAN 1 Lintau. Mr. Hudepri stated that the Project Based Learning and Differentiated Based Learning models are fun learning models for students. This is due to the tendency of high school students to learn problems that are contextual to their daily lives. For example, when learning worship material, students are more interested if they

analyze worship errors. He also said that the religious factor of the Lintau community is still inherent in making students familiar with conceptual studies. The demography of the Lintau area which is still beautiful and far from urban areas makes religious values dominate the daily lives of students.

The independent curriculum uses a problem-based learning model of Project Based Learning and Differentiated Based Learning. Its relevance results in good learning achievement (Noermanzah, 2018) . Project Based Learning is rooted in inquiry-based learning, a pedagogical model derived from constructivism (Barron & Hammond, 2018), which places importance on experiential learning and interaction (Park & Hiver, 2017). (Lee, 2015). Therefore, learners can construct new knowledge based on their current knowledge (Alotaibi, 2020). Researchers pay attention to the 21st century learning paradigm stated in Permendikbudristekdikti number 12 of 2024 and Permendikbud No. 33/H/KR/of 2023 in the skills dimension that students must have the skills to think and act, including; creative, productive, critical, independent, collaborative and communicative (Wiaris, 2021). This provides a challenge to educators to create the next generation of the nation so that they can adapt with competitive skills and mentality (Gallagher, T., Griffin, S., Parker, 2020). Project Based Learning in Islamic education is an effort in learning Islam to be more effective (Maulana, 2024).

The application of the Project Based Learning model by integrating Minangkabau local wisdom has an important urgency in increasing the relevance of Islamic education. In the context of learning objectives, Islamic

Religious Education plays a role in building the character and ethics of students through instilling religious values. Project Based Learning supports this goal by creating learning that is challenging, meaningful, and encourages curiosity and active involvement of learners in group discussions and problem solving.

In terms of learning models, Islamic Religious Education is often conceptual and less interactive, while Project Based Learning offers a practical approach that attracts student participation. The involvement of students in learning Islamic Religious Education is generally still passive, while Project Based Learning encourages students to be directly involved. In addition, Islamic Religious Education materials are often not connected to real life, while Project Based Learning allows materials to be linked to the context of everyday life.

The integration of local wisdom in Project Based Learning is also more feasible, as Minangkabau cultural values can be made part of the contextualized learning process. As a result, learners not only understand religious theory but are also able to apply it in their social and cultural lives. Urgency of Education Problem-based Islamic Religion with the integration of local wisdom can be combined in order to create learning that can improve students' critical thinking skills and not eliminate character and ethical values in themselves. The characteristics of the project-based learning model according to (Riyanti, Erwin & Suriani, 2017) are as follows. First, it is anchored in the core curriculum and multidisciplinary. Second, it involves learners in ongoing efforts. Third, it involves learners in

decision-making. Fourth, it is done collaboratively. Fifth, it has clear real-world connections. Sixth, using systematic assessment both during the process and the final product. Furthermore, Korkmaz and Kaptan (2018), established a framework of rules that learners should adhere to when directing project work, namely the parameters of the study should be clearly defined; each member of the group has the responsibility to contribute; a realistic timeframe for the study should be determined; the practicality of the project plan should be considered (Mahasneh & Alwan, 2018).

Islamic Religious Education aims to guide the behavior of students who are noble and respectful. Learners not only learn about religion, but also can apply religious values in everyday life. In addition, integrating Minangkabau local wisdom in Islamic Religious Education through the Project Based Learning approach is needed to shape the cultural identity and character of students. With the existence of Islamic education based on local wisdom values, it is hoped that it can shape the character of students (Ariza & Tamrin, 2021). The implementation of Project Based Learning with Minangkabau local wisdom experiences obstacles, namely the gap between the existing curriculum and the application of Minangkabau cultural values in education. The development of relevant and fun learning materials also experiences obstacles, so that students can understand and appreciate local wisdom in modern aspects (Akhyar et al., 2023). The application of Project Based Learning integrated with Minangkabau local wisdom with real life, can

train students to think critically (Primadoniati, 2020).

Vogler explained that developing learning with the Project Based Learning model requires concrete stages. Stenfort asserts that project based learning is rooted in experiential learning that engages students in real-world projects to develop problem-solving, critical thinking, and collaboration skills (Pan & Allison, 2020). Contemporary research on project based learning generally focuses on several key aspects, namely the adaptation of Project Based Learning in various learning contexts across disciplines (Stentoft, 2019) and its application in online learning environments (Lin, 2018). In addition, research also highlights the impact of project based learning on students, including perceptions, attitudes, and skill development within the project based learning framework (Vogler et al., 2021).

Loyens explained that development research is an effort to develop and produce a product in the form of material, Project Based Learning model or learning strategy, used to overcome learning problems in the classroom/laboratory and not to test theory (Andita, 2023). Therefore, the research used emphasizes a study that really starts from the natural situation of the classroom. Development research can simply be defined as a research model that is deliberate, systematic, aimed/directed at finding, improving, developing, producing, testing the effectiveness of certain products, models, models, strategies, procedures that are superior, new, effective, efficient, productive and meaningful. While in this study is to develop an Indonesian language learning

model using Project Based Learning (Hawwin Muzakki, 2023). But in addition to using Project Based Learning integrative material must also use a differentiated model.

Differentiation is a teaching and learning process in which learners learn subject matter based on their abilities, what they like, and their individual needs so that they are not frustrated and feel like failures during the learning process (Marantika et al., 2023). According to (Purnawanto, 2023), Differentiated learning is an instructional or learning technique in which educators use various teaching methods to meet the individual needs of each learner according to their needs. These needs can be in the form of existing knowledge, learning style interests, and understanding of the subject. Differentiated learning is a teaching strategy where educators customize teaching methods to suit the unique needs of each learner. These needs could be the knowledge learners already have, their preferred way of learning, their interests, or the extent to which they understand a lesson. The goal is for all learners to learn more effectively according to their individual conditions of desire and readiness in learning learners will add to a learner's creative thinking ability (Astria & Kusuma, 2023).

Islamic Religious Education and differentiation-based learning have a strong relevance in forming students who are faithful, pious, and have noble character. Differentiation allows teachers to adapt learning to the needs, interests and abilities of diverse students. Islamic Religious Education materials such as creed, worship, and morals can be delivered more adaptively so that they

are easily understood and lived. The teacher acts as a facilitator who designs creative learning according to student character. In the Merdeka Curriculum, differentiation supports the achievement of the Pancasila Student Profile based on Islamic values. In the midst of global challenges such as intolerance and moral crises, this approach helps create learning that is humanist, inclusive, and instills the values of peace and tolerance.

Differentiated learning is a way to understand and provide knowledge according to the talents and learning styles of students who have many characters (Wahyuni, 2022). Educators facilitate their students according to the needs of the students themselves, because each student has different conditions and ways of learning (Fauzia & Hadikusuma Ramadan, 2023). Based on the description above, there is a research assumption in the form of which one shows more optimal relevance in using the Islamic Religious Education teaching module integrated with ethnography of Keminangkabauan through the project based learning model or the Differentiated Based Learning model so that educators can implement it carefully.

## METHODS

This research is a comparative quantitative research that aims to analyze the comparison of the effectiveness of two learning models, namely project-based learning models and differentiated learning models, in improving students' reflective thinking skills in learning Islamic Religious Education integrated with ethnography of Keminangkabauan. The background of this research is based on the problem of students'

low understanding of Keminangkabauan local cultural values which has an impact on the weak connection between Islamic Religious Education material and their social and cultural life. So far, learning tends to take place theoretically and less contextualized so that it has not been able to generate reflective awareness and deep understanding in students.

This research was conducted at State Senior High School 1 Lintau, Tanah Datar Regency, involving 158 students and 4 Islamic Religious Education educators. The research used a pseudo-experimental design with two treatment groups, where each group received the application of project-based learning models and differentiated learning models that integrate ethnographic values of Keminangkabauan into Islamic Religious Education materials. Primary data were collected through questionnaires distributed before and after treatment. In addition, interviews and document analysis were used as supporting data.

The questionnaire instrument in this study was prepared based on indicators of reflective thinking skills developed by experts such as John Dewey, Donald Schon, and Kember and their colleagues. The indicators include important dimensions of reflective thinking that reflect self-awareness, evaluation of experience, synthesis, forward planning, self-monitoring, and social and conceptual reflection. Each statement item in the questionnaire is systematically arranged so that it can represent the level of reflective thinking ability of students with valid and reliable.

Data processing was carried out using comparative statistical analysis techniques to identify significant differences between the reflective thinking skills of students who followed the project-based learning model and those who followed the differentiated learning model. The findings of this research are expected to make a real contribution to the development of Islamic Religious Education learning strategies that are more contextual and local culture-based, while strengthening learners' reflective thinking skills as an important part of achieving 21st century competencies. The implications of this research emphasize the importance of selecting learning models that are in accordance with the characteristics of learners and contextual needs to create a meaningful, critical, and applicable learning process.

## RESULTS AND CONCLUSIONS

The researcher conducted an analysis with Islamic education educators of SMAN 1 Lintau using several lines of analysis. First, analyzing the potential of elements/chapters with aspects of Minangkabauan. Second, identification of aspects of Minangkabau philosophy, cultural heritage and Minangkabau National figures as a source of material differentiation. *Third*, triangulate the depth of the material and its relevance to the elements of Islamic education. *Fourth*, developing teaching materials for project-based learning models and differentiated learning with a nuanced approach to Minangkabau ethnography. Fifth, implementing learning. *Sixth*, conduct interviews with grade X educators and students. The results of the analysis flow are presented in the form of the following analysis table:

**Table 4.** Theme of Islam religious education Integrated with Minangkabau Ethnography

No.	Element/Chapter	PjBL Theme		
		Minangkabau Philosophy	Cultural Heritage	National figure
1.	(Al-Quran Hadith) Achieving success with competition in goodness and work ethic as the implementation of QS. Al-Maidah verse 48 and QS. At-Taubah 105	<i>Karatau madang di hulu, babuah babungo balun</i> (Everything needs process and patience; success does not come instantly but through hard work and continuous effort).  <i>Jan diakok kanduang nak diateh, jan dipunjuang pulo sarang bekok nyo tabang</i> (Teaches not to be hasty and work with careful planning for optimal results).	The Magnificence of Goedang Ransoem and Soeroe Coal Mining Museum in Sawahlunto City	Nurjayadi Subakat: Inspirational female figure for economic empowerment in Padang City
2.	(Aqidah) Understand the nature and realize the belief in God with <i>syu'abul iman</i>	<i>Adat Basandi Syara', Syara' Basandi Kitabullah</i> (Indicates that the life of the Minangkabau people is always based on the teachings of Islam, where adat must be in line with sharia).  <i>Indak basasok tapo, indak basandi itunyo iman</i> (Reminding that faith is the basis of all good and right actions).	West Sumatra Grand Mosque in Padang City	Buya Hamka: A Da'wah and Literary Hero who Illuminated Indonesia
3.	(Akhlak) Living a life full of benefits by avoiding extravagance, <i>riya'</i> , <i>sum'ah</i> , <i>arrogance</i> and <i>hasad</i> .	<i>Alam takambang jadi educator, Barek samo dipikua, ringan samo dijinjiang</i> (Showing the importance of cooperation and solidarity in society. <b>Meaning:</b> Sitting equally low, standing equally high. <b>Value:</b> Teaches equality and mutual respect in deliberation)	Rangkiang: A Symbol of Frugality and Life Strategy in Minangkabau	Bung Hatta, Mr. Proclamator who lived a life of simplicity
4.	(Fiqh) Insurance, Banks, Shariah cooperatives for the people's economy and <i>mashlahah</i> business	<i>Bareh sakapa, lauk sakapalo, fate samo diraso.</i> (Meaning, in togetherness, all must feel fair and get their rights. This principle is important in economic life, so that there is no inequality and everyone gets a proportional share).	Numesmatic collection of Bank Indonesia Museum in the Old Building Area of Padang City	Bundo Kanduang: The philosophy and figure of a female leader in Minangkabau: The Keeper of the Heritage

		<p><b><i>Ka rimbo mencari kayu, ka lauik mencari ikan.</i></b> (This means that a person must work hard according to his ability to make ends meet. In an economic context, this emphasizes the importance of effort and hard work in seeking sustenance).</p>	
5.	<p><b>(SKI)</b> Exemplifying the role of scholars who spread the teachings of Islam in Indonesia</p>	<p><b>Elok nagari dek rang jo rang, elok surau dek suluh.</b> (Meaning, the progress of a nagari (village) is achieved through cooperation, and the surau (place of worship) shines because of the light of knowledge. In da'wah, this underscores the importance of religious knowledge as a light for people's lives). <b>Indak lapuak dek rain, indak lakang dek paneh.</b> (This means that the religious teachings brought by the ulama are timeless and continue to be relevant. This confirms that the role of the ulama in maintaining religious values is eternal).</p>	<p>The monument of Syech Ibrahim Datuak, a cleric who preached to spread Islam in Tanah Datar, is located on Jalan Koto Gadang (continued by the rice field road), Jorong Koto Gadang, Nagari Padang Ganting, Padang Ganting District.</p> <p>Tuanku Imam Bonjol was originally from Bonjol, Pasaman. As the leader of the Padri War, Tuanku Imam Bonjol led the struggle to purify the teachings of Islam in Minangkabau.</p>

After completing the process of implementing learning using both project-based learning models and differentiated learning models, researchers proceeded to measure the reflective thinking skills of the students involved. This measurement aimed to assess the extent to which the application of each learning model was able to foster, stimulate, and strengthen the students' capacity for reflective thinking. Reflective thinking in this context encompasses several essential dimensions, including self-awareness, the evaluation of past learning experiences, the ability to reflect meaningfully on actions and learning outcomes, as well as the formulation

of effective future plans for self-improvement. Developing these reflective capacities is considered fundamental to nurturing higher-order thinking skills, personal growth, and lifelong learning attitudes. To ensure data accuracy and relevance, researchers utilized a carefully designed and validated questionnaire, constructed based on widely recognized indicators from established reflective thinking theories. The measurement results provide meaningful insights into how each model uniquely supports the development of reflective thinking. The detailed findings are presented in Table 5 below



**Table 5.** Results of Reflective Thinking Ability Questionnaire of students with Project Based Learning

No	Statement	Reflective Indicator	Score			
			STS	KS	S	SS
1	Lessons are often reflected upon after they are completed to reinforce learning	Evaluation of learning experience	0%	10%	8%	82%
2	The reasons behind failure or success in completing a task become clear through reflection	Self-awareness	0%	56%	39%	5%
3	Work is compared with that of peers to enhance learning	Critical evaluation	0%	16%	44%	40%
4	In facing difficulties, similar past experiences are recalled to find solutions	Experience as a source of learning	0%	19%	19%	62%
5	Important lessons are recorded regularly each week.	Reflection in action	0%	5%	39%	56%
6	Ways to improve learning are regularly self-questioned and reflected upon	Future planning	0%	0%	81%	19%
7	Notes are reviewed to evaluate the level of understanding.	Self-monitoring	0%	0%	0%	100%
8	Feedback from the educator is considered for future improvement	Reflection on feedback	0%	0%	0%	100%
9	Learning is understood as not merely memorizing but also reflecting on meaning	Conceptual reflection	0%	0%	19%	81%
10	Discussions with peers are often conducted to deepen understanding of the subject matter	Social reflection	0%	0%	19%	81%
<b>Average Questionnaire Results</b>			<b>0%</b>	<b>11%</b>	<b>27%</b>	<b>63%</b>

Based on the questionnaire results, it can be seen that the use of project-based learning models has a significant effect on improving students' reflective thinking skills. This is reflected in the ten main indicators which include evaluation of experience, self-awareness, critical evaluation, experience as a source of learning, reflection in action, forward planning, self-monitoring, reflection on feedback, conceptual reflection, and social reflection. Each indicator is measured through statements that are rated using a four-level scale of agreement.

The data showed that the indicators of self-monitoring and reflection on feedback received perfect agreement, with 100% of

learners strongly agreeing. This reflects the success of this model in encouraging learners to actively evaluate and improve themselves. The evaluation of experience indicator also showed positive results with 82% of learners strongly agreeing, indicating an increased reflective awareness of the learning process.

However, some indicators such as self-awareness and critical evaluation still show achievements that need to be improved. On the self-awareness indicator, most learners only chose to disagree, reflecting the weak ability to recognize the causes of success or failure in learning. Similarly, in critical evaluation, some learners are not optimal in comparing the results of their work as material for reflection

and improvement. Meanwhile, on the indicator of planning ahead, most learners show strong reflective awareness, with the dominance of agree and strongly agree answers.

Based on these findings, it is recommended that educators strengthen the reflection process through providing more structured feedback and directing learners to routinely reflect on the causes of their successes and failures. Educators are also advised to integrate group discussion and peer

review as part of the learning strategy, to practice critical evaluation and self-awareness in a social context. In addition, it is important for educators to provide guidance in developing long-term learning plans so that learners are able to develop a sustainable reflective mindset. These efforts are expected to strengthen the effectiveness of project-based learning models in building a full and deep reflective thinking ability in learners.

**Table 6.** Reflective Thinking Questionnaire Results of students with differentiated learning

No	Statement	Reflective Indicator	Score			
			SD	D	A	SA
1	Thinking back to what has been learned after the lesson is over.	Evaluate the learning experience	0%	0%	8%	92%
2	Recognizing failure or success in a task.	Self-awareness	0%	0%	0%	100%
3	Comparing one's own work with that of a friend.	Critical evaluation	0%	46%	14%	40%
4	Remembering similar experiences when facing difficulties.	Experience as a learning resource	0%	19%	19%	62%
5	Writing down important things learned each week.	Reflection in action	0%	0%	19%	81%
6	Asking yourself about improved ways of learning.	Planning ahead	0%	0%	19%	81%
7	Reviewing notes to evaluate understanding.	Self-monitoring	0%	0%	0%	100%
8	Considering improvement after getting feedback from educators	Reflection on feedback	0%	0%	0%	100%
9	Understand that learning is not just memorizing, but also thinking about its meaning	Conceptual reflection	0%	0%	19%	81%
10	Discussing with friends about the subject matter learned	Social reflection	0%	80%	13%	7%
<b>Average Questionnaire Results</b>			<b>0%</b>	<b>15%</b>	<b>11%</b>	<b>74%</b>

Based on the results of measuring students' reflective thinking skills through the application of differentiated learning models, it was found that this model had a significant effect in improving students' reflective skills. This can be seen from the high achievement on most indicators that reflect self-awareness, evaluation of experience, reflection in action, planning ahead, self-monitoring, reflection on feedback, and conceptual reflection.

Some indicators even showed perfect achievement, such as on self-awareness, self-monitoring, and reflection on feedback, where all learners strongly agreed. This reflects that learners are able to understand the reasons behind their success or failure, are accustomed to reflecting on learning records, and are able to utilize feedback as a basis for self-improvement. This shows the success of the

differentiated model in fostering a reflective and independent learning culture.

However, there are indicators that still show weaknesses and need special attention, namely social reflection, critical evaluation, and the use of experience as a learning resource. In the social reflection indicator, the majority of students still disagree, which indicates a low tendency to discuss or share understanding with others. Similarly, in critical evaluation and utilization of past experiences, some learners have not been fully trained to compare results or draw lessons from previous experiences.

Based on these findings, it is recommended that educators strengthen the social reflection aspect by building more collaborative discussion forums, peer feedback, and project-based group work. In addition, educators need to provide stimulus in the form of case studies or reflections on real experiences so that learners are trained to

critically evaluate and draw lessons from past experiences. Providing directed and reflective feedback also needs to be maintained as a strength of this model. Continuous efforts in strengthening these dimensions of reflective thinking are expected to create learning that is not only meaningful but also supports the development of 21st century skills.

After the implementation of project-based learning model and differentiated learning model, the researcher measured and compared the reflective thinking ability of students in both models. This measurement aims to determine the effectiveness of each model in encouraging students to reflect on learning experiences, increase self-awareness, and develop critical and social thinking skills. Each statement in the questionnaire is measured based on reflective indicators that have been systematically arranged. The comparative results of the two learning models are presented in detail in Table 7 below.

**Table 7.** Comparative Results of Reflective Thinking Ability Using Project-based Learning and Differentiated Learning

No.	Statement	Reflective Indicator	Score			
			PjBL		DBL	
			SD	D	A	SA
1	Thinking back to what has been learned after the lesson.	Evaluation of learning experience	8%	82%	8%	92%
2	Recognizing failure or success in a task.	Self-awareness	39%	5%	0%	100%
3	Comparing work with peers	Critical evaluation	44%	40%	14%	40%
4	Remembering similar experiences when facing difficulties.	Experience as a source of learning	19%	62%	19%	62%
5	Writing down important things learned each week.	Reflection in action	39%	56%	19%	81%
6	Asking yourself about how to learn improved.	Planning ahead	81%	19%	19%	81%
7	Reviewing notes to evaluate understanding.	Self-monitoring	0%	100%	0%	100%
8	Considering improvements after getting feedback from educators	Reflection on feedback	0%	100%	0%	100%
9	Learning involves not only memorizing but also understanding meaning	Conceptual reflection	19%	81%	19%	81%
10	Discussing with friends about the subject matter learned	Social reflection	19%	81%	13%	7%

The comparative results show that the reflective thinking ability of students is more improved through the application of differentiated learning model compared to project-based learning model. This can be seen from several indicators that recorded higher percentages in the differentiated model, such as evaluation of learning experience, self-awareness, reflection in action, and future planning. For example, in the self-awareness indicator, all learners in the differentiated model reached 100% strongly agree, while in the project-based model only reached 5% strongly agree.

Some indicators showed balanced results, such as experience as a learning resource, self-monitoring, reflection on feedback, and conceptual reflection, where both models produced similar high levels of agreement. This suggests that both project-based and differentiated learning are equally effective in building these reflective dimensions.

However, there is one indicator where the project-based learning model is superior, which is on social reflection. Learners discussed and shared their understanding more often when using the project-based model compared to the differentiated model.

This finding indicates that the differentiated model is effective in developing internal reflection and self-awareness, while the project-based model is stronger in building social reflection. Therefore, it is recommended that educators combine the two models synergistically to maximize all aspects of learners' reflective thinking, by providing space for social

discussion while strengthening personal reflection in learning.

### **Comparison of Reflective Thinking Ability Using Project-based Learning and Differentiated Learning**

The researcher analyzed the potential of each element or chapter in the Islamic Religious Education curriculum that has a connection with the aspect of science. Islamic Religious Education for tenth grade at the State Senior High School 1 Lintau has a structure of elements consisting of: (Al-Qur'an and Hadith) achieving success with competition in goodness and work ethic as the implementation of Surah Al-Maidah verse 48 and Surah At-Taubah verse 105; (*Aqidah*) understanding the nature and realizing tawheed through syu'abul iman; (*Akhlaq*) living life with full benefit by avoiding the attitude of extravagance, *riya'*, *sum'ah*, *takabur*, and *hasad*; (*Fiqh*) understanding the concept of insurance, banks, and sharia cooperatives to support the people's economy and realize businesses that bring benefits; and (History of Islamic Culture) emulating the role of ulama in the spread of Islamic teachings in Indonesia.

The Head of State Senior High School 1 Lintau, Mrs. Ida Suryani, confirmed that students were very enthusiastic about participating in various learning model innovations. She said that the innovation made by Mr. Hudepri by presenting Minangkabau ethnographic values that are relevant and close to the lives of students as learning resources has received very positive appreciation from parents. The introduction of local culture around the school is believed to be able to foster

religious Minangkabau local wisdom values in students. He also hopes that this project-based learning innovation can continue to be developed in subsequent semesters in various elements of Islamic Religious Education.

Putri Junita, one of the tenth grade students, expressed high enthusiasm for the implementation of this project-based learning. According to her, learning Islamic Religious Education becomes more contextual and in accordance with the times through the integration of Keminangkabauan values. He and his friends feel that a lot of material that was previously considered abstract can actually be found in everyday life. In line with this, Angga Rasyid also stated that he and his colleagues felt motivated by Islamic Religious Education materials enriched with local values. They did not expect that the material could be a source of fun, meaningful projects that could be completed in the available learning time. For the students at Sekolah Menengah Atas Negeri 1 Lintau, Minangkabau local wisdom is a cultural heritage that is starting to be marginalized, and they hope that further Islamic Religious Education materials can continue to introduce Minangkabau values through various learning models.

Hudepri, as an Islamic Religious Education educator, explained that this project-based learning was developed with a differentiation-based learning approach. Through this approach, learners are given the freedom to choose diverse local wisdom values, conduct different explorations, and produce varied works according to their respective interests and abilities. This differentiation approach is designed by

considering the diversity of Minangkabau ethnographic materials that can be introduced to learners. Learners also become more creative in making projects according to the availability of time and resources. Project-based learning integrated with Minangkabau ethnographic values does not have to be done by reaching distant locations, but learners can choose the most relevant approach to their situation.

Comparison of learning focus shows that project-based learning emphasizes the core principles and concepts of a discipline that involves learners in the process of problem-solving investigations and meaningful activities that allow them to construct knowledge independently and produce real products. To realize this, there are five principles of project-based learning according to Thomas (2016), namely: first, the principle of centrality which emphasizes that project work is the core of the curriculum; second, the principle of driving questions as external motivation that arouses learners' independence in completing tasks; third, the principle of autonomy which gives full independence to learners in the learning process; fourth, the principle of reality which emphasizes that projects must be directly related to the real world; and fifth, the principle of real product creation which is the ultimate goal of learning.

Meanwhile, according to Stienberg as cited by Kelly (2020), there are six strategies in differentiation-based learning known as The Six A's of Designing Project, namely: authenticity, adherence to academic values (Academic Rigor), real-world application-based learning (Applied Learning), active

exploration (Active Exploration), building relationships with experts (Adult Relationship), and assessment (Assessment). These six strategies become the guidelines in designing differentiation-based learning models so that the learning experience becomes more meaningful and relevant to students' self-development. This finding shows that the focus of learning using differentiation-based learning model tends to be more optimal in supporting the uniqueness and needs of individuals than project-based learning which tends to be more structured.

The comparison of learning activities according to Albritton and Stacks (2016) shows that the project-based learning process involves: first, problem identification and solution search; second, initiative in various educational activities both individually and in groups; third, production of final results; fourth, involvement in long-term work; and fifth, shifting the role of educators from information center to facilitator. Furthermore, Lerner and Mergendoller (2018) point out that important elements in project-based learning include significant content, development of 21st century competencies, in-depth inquiry, creation of driving questions, engagement in the critique and revision process, and presentation of results before a public audience (Amaral, Goncalves, and Hess, 2015).

On the other hand, differentiation-based learning according to Fried-Booth (Sasmiza et al., 2023) in Wurdinger and colleagues (in Zulfadhli et al., 2021) asserts that the steps in differentiation-based learning reflect the reflective process of

designing and completing a variety of diverse learning activities. Bell (Widyaiswara et al., 2019) added that in differentiation-based learning, educators provide a variety of topics for individual or group learning that are developed by learners through research or projects, with educators acting as mentors and monitors. Based on Koh and colleagues' research (in Susmita et al., 2024), several findings were obtained: first, the provision of design-based problems is more optimally solved using differentiation-based learning; second, target structuring to facilitate knowledge construction is more effective with project-based learning; third, the development of learning artifacts is more optimal with project-based learning; and fourth, the facilitation of higher-level learning is more effective using project-based learning (Wahyuni et al., 2024).

## CONCLUSIONS

Based on the comparative results obtained, it can be concluded that the reflective thinking ability of students is more optimal by using a differentiation-based learning model, especially on indicators of self-awareness, reflection-in-action, and future planning. Meanwhile, the use of project-based learning models with a differentiated approach also has a significant effect, especially on indicators of experience as a learning resource, self-monitoring, and conceptual reflection. The reflective thinking ability in the aspect of social reflection is superior through the application of project-based learning model.

The questionnaire results show that the formation of reflective thinking skills through differentiation-based learning models received very positive responses, with 11% of students agreeing and 74% strongly agreeing. Meanwhile, in the project-based learning model, 27% of learners agreed and 63% strongly agreed.

The implication of this finding is that the implementation of both differentiation-based and project-based learning models needs to be continuously developed to improve learners' reflective thinking skills as a whole. Educators are advised to combine the strengths of both models in order to meet diverse learning needs, strengthen reflective abilities, and shape the character and creativity of learners who are aligned with local wisdom values.

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