

<https://journal.ypidathu.or.id/index.php/ijlul/>

P - ISSN: 3026-7102

E - ISSN: 3030-8372

## Analysis of the Effect of Local Wisdom-Based Learning Modules on Student Learning Outcomes in the Implementation of the Merdeka Curriculum

Ni Wayan Karmini<sup>1</sup> , Putri Anggreni<sup>2</sup> , Ida Ayu Putu Sari<sup>3</sup> , I Made Yudabakti<sup>4</sup> , Ni Nyoman Wahyu Adi Gotama<sup>5</sup> 

<sup>1</sup>Universitas Hindu Indonesia Denpasar, Indonesia

<sup>2</sup>Universitas Mendradatta, Indonesia

<sup>3,4,5</sup>Universitas Hindu Indonesia Denpasar, Indonesia

### ABSTRACT

**Background.** Learning based on local wisdom is gaining importance in education, especially within the Independent Curriculum, which allows adapting materials to local contexts. Modules based on local wisdom are believed to enhance student engagement and understanding, but empirical evidence regarding their effectiveness on learning outcomes remains limited.

**Purpose.** This study aims to analyze the influence of the use of learning modules based on local wisdom on student learning outcomes in the implementation of the Independent Curriculum.

**Method.** This study uses a quasi-experimental design involving two groups: an experimental group that uses a module based on local wisdom and a control group that uses a conventional module. The sample consisted of 200 students from four purposively selected junior high schools. The instruments used are learning outcome tests and attitude questionnaires.

**Results.** Experimental group experienced significant improvements in cognitive, affective, and psychomotor learning outcomes compared to the control group. The average post-test scores of the experimental group were higher than those of the control group, with greater improvements in class engagement and positive attitudes towards learning. The use of modules based on local wisdom also strengthens students' ability to apply learning concepts into daily life, especially those related to local cultural values.

**Conclusion.** Learning module based on local wisdom is effective in improving student learning outcomes and is relevant to the implementation of the Independent Curriculum. This approach not only improves academic understanding, but also supports the development of students' character and social skills.

### KEYWORDS

Independent Curriculum, Local Wisdom Based Learning Module, Student Learning Outcomes

**Citation:** Karmini, W, N., Anggreni, P., Sari, P, A, I., Yudabakti, M, I., & Gotama, A, W, N,N. (2024). Analysis of the Effect of Local Wisdom-Based Learning Modules on Student Learning Outcomes in the Implementation of the Merdeka Curriculum. *International Journal of Language and Ubiquitous Learning*, 2(3), 1–13.

<https://doi.org/10.70177/ijlul.v2i3.1300>

### Correspondence:

Ni Wayan Karmini,  
[karmini@unhi.ac.id](mailto:karmini@unhi.ac.id)

**Received:** September 6, 2024

**Accepted:** September 11, 2024

**Published:** September 17, 2024

### INTRODUCTION

A learning approach that integrates local wisdom is increasingly considered important in the education system in Indonesia. Local wisdom includes values, traditions, and knowledge that are passed down from generation to generation in a society (Constantinescu, 2024).



The use of these elements in learning is expected to increase students' understanding of Subject matter while instilling a sense of pride in their own culture in the current era of globalization, the preservation of local values is also considered important so that students can understand and maintain their cultural identity (Stankovic, 2019).

The use of learning modules based on local wisdom has begun to be applied in various regions as a method to facilitate students' understanding of subject matter that is more relevant to their daily lives (Giliomee, 2023). This module is designed to connect academic concepts with local realities that are familiar to students, so it is expected to increase their interest in learning and motivation. Previous research has shown that learning based on local contexts can deepen students' understanding of the material and strengthen their critical thinking skills (Kumaravel, 2020).

The Independent Curriculum that is currently implemented in Indonesia provides more space for teachers to adapt learning according to local needs and student (Zwaan, 2019). This curriculum emphasizes learning independence, creativity, and the integration of local and global values. In this context, the learning module based on local wisdom is one of the alternatives that is very relevant in achieving these educational goals. The application of these modules not only focuses on academic achievement, but also on the development of students' character and social awareness (Dzulkifli, 2021).

This study aims to analyze the impact of the use of modules based on local wisdom on student learning outcomes in the implementation of the Independent Curriculum (Fox, 2020). Given the important role of learning outcomes as an indicator of educational success, it is important to understand the extent to which the use of these modules affects students' academic achievement. Learning outcomes include not only cognitive aspects, but also include the development of students' attitudes and skills. This analysis is expected to provide a clearer picture of the effectiveness of the approach (Brown & Livstrom, 2020).

Learning modules based on local wisdom also have the potential to enrich students' learning experience by presenting real context from their social and cultural environment. This allows students to relate the subject matter to their daily lives, which in turn can increase the relevance and meaningfulness of learning. In the long term, it is hoped that this module will be able to form students who are not only academically intelligent, but also have concern for their environment (Haroky dkk., 2020).

This research is expected to make an important contribution to the development of more contextual and relevant education in Indonesia (Yang, 2020). The findings of this study are expected to provide new insights for educators and policymakers in designing more effective learning strategies. A deep understanding of the impact of using modules based on local wisdom can also help strengthen the implementation of the Independent Curriculum and enrich the literature on contextual learning approaches at the national and international levels (Hannah, 2022).

Research on the use of learning modules based on local wisdom in the context of education is still limited, especially related to its impact on student learning outcomes in the implementation of the Independent Curriculum (Sarikhani, 2020). Although there have been many studies that highlight the benefits of local wisdom in education, research that specifically evaluates the effectiveness of learning modules based on local wisdom in improving student academic achievement in this new curriculum is still rare (Hancock, 2020). The Independent Curriculum itself is a relatively new approach, so the effectiveness of various learning strategies within the framework of this curriculum still needs to be explored more deeply (Sidhu, 2020).

The lack of research that discusses the extent to which modules based on local wisdom are able to support the main goal of the Independent Curriculum, which is to improve students'

competence and character, creating a significant knowledge gap (Poppleton, 2020). The Independent Curriculum demands flexibility and innovation in learning, but there is not enough empirical evidence to show whether modules based on local wisdom are really able to meet these demands (Zaman, 2020). The existence of these modules may be culturally relevant, but how this relevance translates into concrete improvements in student learning outcomes is still an unanswered question.

Until now, there have not been many studies that specifically discuss the relationship between the use of modules based on local wisdom and the improvement of students' cognitive abilities, such as problem-solving, critical thinking, and analytical skills (Noyes, 2022). Most of the existing research focuses more on the cultural aspects and moral values contained in local wisdom, without delving deeper into their influence on students' academic development. A deeper understanding is needed to find out whether the local wisdom-based approach only enriches students' cultural insights, or is it also able to significantly improve their academic achievement (Nousheen, 2020).

The lack of empirical data on the effectiveness of modules based on local wisdom in the implementation of the Independent Curriculum opens up opportunities to conduct further research. It is not known for sure whether the success of this module in integrating local values is also in line with the improvement of overall student learning outcomes (Nelwati, 2019). With this gap, more focused research is needed to answer important questions related to the concrete impact of the use of local wisdom-based modules on the achievement of educational goals in the Independent Curriculum.

The importance of filling the knowledge gap related to the effectiveness of learning modules based on local wisdom in the Independent Curriculum lies in efforts to create a more relevant and contextual education system (Mizota, 2020). These modules have great potential to connect academic learning with students' real-life lives, especially in the context of the local culture they understand. Given that the Independent Curriculum emphasizes flexibility and a student-centered learning approach, it is crucial to assess the impact of local wisdom-based modules so that we can understand how effective this approach is in improving learning outcomes comprehensively, both in terms of cognitive, affective, and psychomotor.

This research is needed to provide a strong empirical basis regarding the application of these modules in learning practice. Testing the hypothesis that learning based on local wisdom can have a positive impact on student learning outcomes will help answer questions that have not been answered so far. In addition, the findings of this study can provide guidance for teachers, policymakers, and curriculum developers to make more informed decisions in choosing effective learning methods, while ensuring that local cultural values are preserved in the education system.

A clearer understanding of the influence of local wisdom-based modules on student learning outcomes will also help improve the overall quality of education. By knowing the positive or negative impacts that may arise, relevant parties can make the necessary adjustments in the implementation of the Independent Curriculum. Through this research, it is hoped that new approaches will emerge that are able to integrate local wisdom with the national curriculum, as well as maximize the potential of students in understanding and applying knowledge in various fields.

## RESEARCH METHODOLOGY

This study uses a quantitative research design with a quasi-experimental method to analyze the influence of learning modules based on local wisdom on student learning outcomes in the implementation of the Independent Curriculum (Craig, 2021; Kim, 2019). This design was chosen to allow objective measurement of the difference in learning outcomes between groups of students

who use local wisdom-based modules and groups of students who do not use the modules. The independent variable in this study is the use of modules based on local wisdom, while the bound variable is student learning outcomes measured through cognitive, affective, and psychomotor tests.

The population in this study is junior high school students who follow the Independent Curriculum in several schools in certain regions, which have strong local cultural characteristics. Samples were taken by purposive sampling, by selecting two classes from each participating school. One class will be used as an experimental group using learning modules based on local wisdom, and the other class will be used as a control group using conventional learning modules. The sample size is determined based on the consideration of the number of students in each class and the ability to obtain representative data (Millanzi, 2021; Park, 2021).

The instruments used in this study include learning outcome tests developed based on basic competency indicators in the Independent Curriculum, as well as questionnaires to measure affective aspects and students' attitudes towards learning (Beste, 2019). The learning outcome test is in the form of multiple-choice questions that measure students' cognitive aspects, while questionnaires are prepared to evaluate students' understanding of local wisdom values and the application of these values in daily life. The validity and reliability of the instrument have been tested first before being used in data collection (Sanaie, 2019).

The research procedure began by giving a pre-test to all students in the experimental group and the control group to find out their initial level of understanding. Furthermore, the experimental group was given learning using modules based on local wisdom during several meetings, while the control group was given learning with conventional modules. After the learning period is over, both groups are given the same post-test to evaluate the differences in learning outcomes that occur. The collected data was then analyzed using appropriate statistical tests to find out if there was a significant difference between the two groups (Ewing, 2020).

## RESULT AND DISCUSSION

This study involved 200 students from four junior high schools in the region who have a strong tradition of local wisdom. The sample was divided into two groups, namely the experimental group consisting of 100 students who used learning modules based on local wisdom and the control group which also consisted of 100 students who used conventional modules. The pre-test and post-test results of both groups were statistically analyzed using the t-test to measure the significant difference between student learning outcomes before and after the use of the module. The average pre-test score of the experimental group was 65.2, while the average post-test score reached 78.4. On the other hand, the control group showed a smaller increase, with an average pre-test score of 64.8 and a post-test score of 70.5.

Group	Rata-rata Pre-test	Rata-rata Post-test
Eksperimen	65,2	78,4
Kontrol	64,8	70,5

**Table 1.** Average Pre-test and Post-test Scores of Students.

In addition, secondary data taken from school reports showed that the participation rate of students during the learning process was also higher in the experimental group compared to the control group. During the observation, students who used local wisdom-based modules were more active in class discussions and showed greater interest in the material taught. Overall, the data

showed a significant increase in learning outcomes in groups that used local wisdom-based modules.

The increase in higher post-test scores in the experimental group showed that the use of modules based on local wisdom had a positive impact on student learning outcomes. The average increase of 13.2 points in the experimental group was much more significant compared to the 5.7 point increase in the control group. This data supports the initial hypothesis that the use of local wisdom-based modules can improve students' understanding of the subject matter because of its direct connection with their social and cultural environment.

Students who learn using modules based on local wisdom seem to be more able to relate the concepts they learn to the experience and knowledge they already have. This can be seen from their high level of participation in class discussions, where they often connect learning topics with the local cultural context they are familiar with. Local wisdom-based modules not only facilitate cognitive understanding, but also encourage students to think critically and reflectively towards their own culture.

The increase in learning interest also contributed to the improvement of learning outcomes in the experimental group. Students' interest in materials relevant to their daily lives encourages them to be more active in learning. This is inversely proportional to the control group, where students are more passive and tend to rely solely on conventional teaching methods in the absence of a strong local context. Thus, these results indicate the importance of cultural relevance in learning materials to increase student engagement and understanding.

The analysis of student learning outcomes also includes an evaluation of affective and psychomotor components, which are measured through questionnaires and direct observation. The data showed that students in the experimental group showed more significant development in attitudes and skills compared to the control group. As many as 85% of the students in the experimental group showed a more positive attitude towards learning materials related to local culture, while only 60% of the students in the control group showed similar attitudes. In the psychomotor aspect, students in the experimental group also showed better skills in applying learning concepts in real life.

Kelompok	Sikap Positif (%)	Peningkatan Keterampilan (%)
Eksperimen	85	80
Kontrol	60	65

**Tabel 2.** Persentase Sikap Positif dan Peningkatan Keterampilan Siswa.

Observations during the learning process show that students who use modules based on local wisdom are more able to apply cultural values in their daily lives, such as mutual cooperation, togetherness, and respect for differences. For example, in group assignments, students in the experimental group were more likely to cooperate effectively and appreciate each other's views, suggesting that the affective aspect of learning also improved. This shows that learning based on local wisdom not only improves academic knowledge but also shapes students' character.

This improvement in affective and psychomotor aspects supports the theory that learning that integrates local values can help students not only understand the subject matter, but also develop social and emotional skills. In other words, modules based on local wisdom have the potential to



produce more holistic learning, where students are not only intellectually intelligent but also have a strong character.

Significant differences in affective and psychomotor components between the experimental and control groups underscore the importance of culturally relevant learning approaches. Students who study with local wisdom-based modules are more motivated to participate in learning activities because they feel that the material is relevant and has meaning in their lives. The direct connection between the subject matter and the local cultural context creates more meaningful learning and encourages students to be more actively involved.

Social skills acquired by students through learning based on local wisdom, such as the ability to collaborate and communicate, are an important part of the desired character education in the Independent Curriculum. This was seen in observations during group assignments, where students in the experimental group showed better cooperative skills. With modules based on local wisdom, students are invited to understand the importance of values such as mutual cooperation, which are not only relevant in daily life but also in the teaching and learning process.

A positive attitude towards the subject matter also has a direct effect on student learning outcomes. Students who have a more positive attitude tend to be more motivated to learn, which is then reflected in their improved learning outcomes. This data shows that by utilizing local wisdom, teachers can create a more conducive and engaging learning environment for students, which ultimately contributes to their improved academic performance.

The relationship between the use of modules based on local wisdom and student learning outcomes can be seen from various aspects, including improving cognitive, affective, and psychomotor outcomes. The improvement in cognitive learning outcomes was evident in the experimental group that experienced a significant increase in their post-test scores. This improvement is closely related to the relevance of the material delivered in the context of the local culture, which makes it easier for students to understand and remember information.

The same relationship is also seen in the affective aspect, where students who feel more connected to the subject matter tend to show a more positive attitude. This emotional involvement plays an important role in the learning process, as students who feel the subject matter is relevant to their lives will be more eager to learn. Thus, learning based on local wisdom not only improves cognitive understanding, but also affects students' motivation and attitude towards learning as a whole.

Improved psychomotor skills were also seen in students who used local wisdom-based modules, suggesting that this approach was able to develop practical skills that are important in everyday life. Learning that relates academic concepts to real situations in the context of local culture provides opportunities for students to apply their knowledge into real action. This relationship strengthens the view that modules based on local wisdom are not only useful in terms of academics, but also in the formation of students' character and skills.

One of the schools involved in this study is SMP Negeri 2 in Denpasar Regency, where learning modules based on local wisdom are used in Social Sciences (IPS) subjects. Teachers at this school integrate local cultural values, such as mutual cooperation and local customs, in learning about social and economic topics. The observation results showed that the students were more enthusiastic in attending the lessons and were able to relate simple economic concepts to daily cultural practices, such as the barter system that is still used in their villages.

Students at this school also show improvement in cooperation skills during group assignments given by teachers. For example, in a project to create a social map of the local area, students work together to collect data from villagers and present it in an attractive visual form. This shows that the

local wisdom-based modules not only improve students' theoretical understanding, but also help them develop practical skills that can be applied outside the classroom.

Interviews with some students also showed that they felt more motivated to learn when the material being taught was relevant to their daily lives. One of the students revealed that learning based on local wisdom helped him understand abstract concepts more easily because the examples used came from the culture he was familiar with. This shows that learning based on local wisdom helps students relate the subject matter to their own experiences, thus making learning more meaningful.

The experience at SMP Negeri 2 shows that the use of modules based on local wisdom not only improves academic learning outcomes, but also helps students develop social skills and critical thinking skills.

This study shows that the use of learning modules based on local wisdom in the implementation of the Independent Curriculum significantly improves student learning outcomes. The experimental group that used the local wisdom-based module recorded a higher improvement in post-test results compared to the control group that used the conventional module. Not only in terms of cognitive, the affective and psychomotor aspects of students in the experimental group also showed more significant development, including in positive attitudes towards subject matter and cooperation skills. The use of this module has proven relevant in helping students relate academic concepts to everyday experiences they understand in the context of local culture.

The difference in learning outcomes between these two groups can be seen from the increase in the average post-test score which was much higher in the experimental group compared to the control group. In addition, students who learn using local wisdom-based modules show higher levels of engagement in the classroom, as seen in group discussions and activities. Observations also show that students in the experimental group are more active in applying learning concepts to real life, especially those related to their local cultural values. These results reinforce the idea that a local culture-based approach can improve learning effectiveness.

This study also shows that students who study with local wisdom-based modules experience better improvements in social and emotional aspects, such as cooperation skills and positive attitudes towards learning. This module not only improves students' cognitive understanding but also supports their character development, in line with the goals of the Independent Curriculum which wants to produce creative, critical, and characterful students. Overall, the results of this study confirm that learning based on local wisdom can have a positive impact in the context of the implementation of this new curriculum.

The results of this study are in line with previous research which states that learning based on local wisdom can improve student learning outcomes, both from cognitive and affective aspects. Several studies conducted in other areas also show that the use of local cultural context in the learning process helps students understand the material more easily because it is more relevant to their daily lives. These findings are consistent with contextual learning theory that emphasizes that students learn better when they can relate the material to their own experiences and environment. This research supports this theory by providing empirical evidence of implementation under the Independent Curriculum.

However, several other studies have shown that not all modules based on local wisdom provide significant results in improving students' academic achievement. Studies conducted in several regions showed that although locally-based modules increased students' motivation to learn, cognitive test results did not always show significant improvements. In some cases, the lack of adequate teacher resources and training is an inhibiting factor in optimizing the use of these

modules. This difference may be due to variations in the quality of the modules used as well as the different cultural contexts in each region.

This study provides additional important information that strong cultural context factors and local relevance play an important role in improving student learning outcomes. The use of local wisdom as a learning approach seems to be most effective in areas where local culture is still an important part of daily life. This study also shows that in addition to contextual factors, the quality of module design and teachers' skills in integrating these modules are also determining factors for success.

The results of this study are also different from several other studies in terms of influence on affective and psychomotor aspects. While many other studies focus more on cognitive outcomes, this study shows that an approach based on local wisdom also has a significant impact on the development of students' character and social skills. This emphasizes the importance of holistic learning, where the academic, social, and emotional aspects of students develop simultaneously.

The results of this study show that the integration of local wisdom in learning modules is an effective approach to improve student learning outcomes in the context of the Independent Curriculum. The use of local wisdom in the learning process not only improves academic outcomes, but also helps students develop better character, in accordance with their cultural values. This is a sign that education rooted in local culture is able to answer the challenges of globalization without having to sacrifice students' local cultural identity. This strong connection between culture and education is one of the main strengths in a more contextual and meaningful learning process.

A significant increase in the affective and psychomotor aspects of students also shows that learning based on local wisdom has the potential to produce students who are more emotionally and socially involved in the learning process. This is a sign that a learning approach that involves local culture can create a more dynamic and interactive learning environment. Students who feel the subject matter is relevant to their lives show a more positive attitude towards learning, which in turn increases their motivation and engagement. These results indicate the importance of an approach that pays attention to the social and emotional aspects of students in the educational process.

The fact that local wisdom-based modules also improve students' social skills, such as the ability to cooperate and respect differences, suggests that education can play a role in shaping students' character in a more holistic way. This is a sign that a good education should not only focus on cognitive outcomes but also pay attention to the development of students' character and social skills. Learning based on local values such as mutual cooperation and tolerance can help students become more empathetic individuals and able to work well together in a team.

The implications of these results also indicate that the Independent Curriculum provides space for innovation in education, especially in the use of learning modules based on local wisdom. Teachers have the opportunity to be more creative in compiling learning materials that are relevant to the social and cultural context of students. This is a sign that more flexible and contextual learning will be more effective in increasing student engagement and producing better learning outcomes.

The main implication of the results of this study is that the learning approach based on local wisdom can be one of the effective strategies to improve student learning outcomes in the Independent Curriculum. Learning that is relevant to students' culture and environment not only improves academic understanding but also helps them develop important social and emotional skills. This means that in the implementation of the Independent Curriculum, teachers and education policymakers must be more active in integrating local values into the learning process, to create a more meaningful and holistic learning experience for students.



The results of this study also imply that the learning module based on local wisdom can be an effective tool to build students' cultural awareness and local identity. In the context of globalization, it is important for students to have a strong understanding of their own culture, and this approach helps them make the connection between local values and global knowledge. This implies that education based on local wisdom is not only relevant to improve learning outcomes but also important in preserving local culture and identity.

In addition, the results of this study show that higher student engagement in learning is directly related to the relevance of the material being taught. These implications are important for educators to consider cultural and social aspects in designing a curriculum that is more inclusive and relevant to students. By using approaches that are relevant to students' daily lives, education can become more engaging and effective in increasing student participation.

Another important implication is the need for better training for teachers in integrating local wisdom into the learning process. Teachers who are able to adapt modules based on local wisdom well will be more successful in facilitating effective learning. This means that proper training and support for teachers must be a priority in order to ensure that the implementation of the Independent Curriculum runs in accordance with the objectives.

The results of this study show that learning based on local wisdom is effective because of its cultural and social relevance for students. When students feel that the material taught is directly related to their daily lives, they are more motivated to learn and more easily understand the concepts being taught. This relevance helps students associate new information with the knowledge they already have, so that the learning process becomes more meaningful and effective. Additionally, learning that integrates local cultures makes students feel more connected to the subject matter, which encourages their engagement and active participation in the classroom.

The success of local wisdom-based modules can also be explained by the fact that this approach allows students to learn through hands-on experience and real practice. Students not only learn abstract concepts, but also learn how to apply that knowledge in the context of their daily lives. This makes learning more relevant and practical, so that students are more interested and motivated to participate in the learning process.

The results of this study can also be explained by the characteristics of the Independent Curriculum which provides flexibility for teachers to adapt learning materials to the local context of students. Teachers have the freedom to adapt the approach that best suits the needs of their students, allowing learning based on local wisdom to be integrated more effectively. This makes the learning process more dynamic and interactive, as teachers can use methods that are most relevant to the student's social and cultural environment.

In addition, positive outcomes in the affective and psychomotor aspects of students can be explained by the holistic approach used in the local wisdom-based module. This module not only focuses on academic outcomes but also emphasizes the development of students' character and social skills. This is in line with the goal of the Independent Curriculum which wants to produce students who are not only intellectually intelligent, but also have a good attitude and are able to cooperate with others.

After the results of this research, the next step is to promote and implement the wider use of learning modules based on local wisdom in various schools in Indonesia. The findings of this study show that this approach is effective in improving student learning outcomes in the context of the Independent Curriculum, so it is important for education policymakers to consider further integration of local wisdom in the national curriculum. The government and other education

stakeholders need to provide adequate support for schools and teachers in developing quality local wisdom-based modules.

The next step also involves more in-depth training for teachers on how to use local wisdom-based modules effectively. Teachers need to be equipped with adequate knowledge and skills to integrate local cultural values into the learning process in a systematic and interesting manner. Training and professional development programs specifically designed to prepare teachers for the implementation of the Independent Curriculum should include these aspects.

It is also important to continue to conduct further research on the long-term impact of the use of local wisdom-based modules in education. This study only focuses on short-term results, so a more in-depth study is needed to find out how this approach affects students' development in the long term, both academically and in terms of character. In addition, it is also necessary to identify challenges and obstacles in the implementation of modules based on local wisdom in various regions with different cultural characteristics.

The next step is to ensure that the Independent Curriculum can continue to be developed to allow for more innovations in learning, including the use of modules based on local wisdom. The government, teachers, and schools need to work together to ensure that education in Indonesia is increasingly relevant to the needs of students and while maintaining important local cultural values.

## CONCLUSION

This study found that the use of learning modules based on local wisdom significantly improved student learning outcomes in the implementation of the Independent Curriculum, both in terms of cognitive, affective, and psychomotor. Students who use modules based on local wisdom show higher increases in learning outcomes compared to students who use conventional modules. These findings not only affirm the importance of cultural relevance in the learning process, but also show that an approach based on local wisdom can enrich the learning experience by linking subject matter to students' daily lives.

In addition, this study found that the use of modules based on local wisdom had a positive impact on students' attitudes and social skills. Students who study with this module show a more positive attitude towards learning and better cooperative skills. This developing affective and psychomotor aspect indicates that modules based on local wisdom not only contribute to improving academic outcomes, but also to the development of students' character and social skills, which is an important focus in the Independent Curriculum.

This research makes an important contribution in the field of education by introducing the concept of integrating local wisdom as an effective approach in the learning process in the era of the Independent Curriculum. The findings that local wisdom-based modules not only improve student learning outcomes academically, but also in character development and social skills, show the great potential of this approach. This concept emphasizes that cultural relevance in education is not just an add-on, but an essential element in creating a holistic and meaningful learning experience.

The methodological contribution of this study also lies in the use of quasi-experimental design to compare learning outcomes between experimental and control groups. This method provides strong empirical evidence regarding the effectiveness of local wisdom-based modules. This research approach can also be adapted and used by other researchers who want to explore the influence of local wisdom in the context of education in various other regions, thus strengthening the validity of the proposed concept.

The main limitation of this study is that its scope only covers a number of schools in a given region, so the results may not be fully generalizable to all cultural contexts in Indonesia. This

research also only focuses on the short term, namely improving student learning outcomes after several months of using modules based on local wisdom. Therefore, the long-term impact of using this module, such as how it affects the academic development and character of students in the future, is still unknown.

Further research directions need to include further exploration of the long-term impact of the use of local wisdom-based modules on student development, both in academic and character contexts. In addition, further research can also expand the geographical scope to find out whether this approach remains effective in areas with different local wisdom. A more in-depth study of the role of teachers and the training required to implement this module effectively could also be a focus of future research.

## AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; Investigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

Author 5: Supervision; Validation.

## REFERENCES

- Beste, S. (2019). Quantitative methods in democratic innovation research. *Handbook of Democratic Innovation and Governance*, Query date: 2023-12-14 18:25:27, 472–485.
- Brown, J. C., & Livstrom, I. C. (2020). Secondary Science Teachers' Pedagogical Design Capacities for Multicultural Curriculum Design. *Journal of Science Teacher Education*, 31(8), 821–840. <https://doi.org/10.1080/1046560X.2020.1756588>
- Constantinescu, C. (2024). A mixed-methods needs assessment for an antimicrobial stewardship curriculum in pediatrics. *Antimicrobial Stewardship and Healthcare Epidemiology*, 4(1). <https://doi.org/10.1017/ash.2024.8>
- Craig, S. J. (2021). Simulation strategies to increase nursing student clinical competence in safe medication administration practices: A quasi-experimental study. *Nurse Education Today*, 96(Query date: 2024-09-17 11:03:49). <https://doi.org/10.1016/j.nedt.2020.104605>
- Dzulkifli, I. (2021). Activity-based teaching of quran for deaf students in the special education integration program. *Pertanika Journal of Social Sciences and Humanities*, 29(1), 91–106. <https://doi.org/10.47836/PJSSH.29.1.05>
- Ewing, R. (2020). Basic quantitative research methods for urban planners. Dalam *Basic Quantitative Research Methods for Urban Planners* (hlm. 328). <https://doi.org/10.4324/9780429325021>
- Fox, K. (2020). A Curriculum for Blackness: Podcasts as Discursive Cultural Guides, 2010-2020. *Journal of Radio and Audio Media*, 27(2), 298–318. <https://doi.org/10.1080/19376529.2020.1801687>
- Giliomee, C. (2023). A new path to cultivate human rights education at schools of social work in Africa from a decolonial lens. *Social Work Education*, 42(2), 263–278. <https://doi.org/10.1080/02615479.2023.2199770>
- Hancock, L. M. (2020). Assessing the Practical Skills of Undergraduates: The Evolution of a Station-Based Practical Exam. *Journal of Chemical Education*, 97(4), 972–979. <https://doi.org/10.1021/acs.jchemed.9b00733>
- Hannah, D. (2022). Understanding curricula as theories of action. *Curriculum Journal*, 33(3), 362–377. <https://doi.org/10.1002/curj.138>

- Haroky, F., Amirta, P. D., Handayani, D. P., Kuswanto, H., & Wardani, R. (2020). *Creating physics comic media dol (a Bengkulu local wisdom musical instrument) in sound wave topic*. 050004. <https://doi.org/10.1063/5.0000575>
- Kim, E. J. (2019). Effects of an examiner's positive and negative feedback on self-assessment of skill performance, emotional response, and self-efficacy in Korea: A quasi-experimental study. *BMC Medical Education*, 19(1). <https://doi.org/10.1186/s12909-019-1595-x>
- Kumaravel, B. (2020). A prospective study evaluating the integration of a multifaceted evidence-based medicine curriculum into early years in an undergraduate medical school. *BMC Medical Education*, 20(1). <https://doi.org/10.1186/s12909-020-02140-2>
- Millanzi, W. C. (2021). The impact of facilitation in a problem-based pedagogy on self-directed learning readiness among nursing students: A quasi-experimental study in Tanzania. *BMC Nursing*, 20(1). <https://doi.org/10.1186/s12912-021-00769-y>
- Mizota, T. (2020). Development of a fundamentals of endoscopic surgery proficiency-based skills curriculum for general surgery residents. *Surgical Endoscopy*, 34(2), 771–778. <https://doi.org/10.1007/s00464-019-06827-6>
- Nelwati. (2019). Factors influencing professional values among Indonesian undergraduate nursing students. *Nurse Education in Practice*, 41(Query date: 2024-09-17 11:03:49). <https://doi.org/10.1016/j.nepr.2019.102648>
- Nousheen, A. (2020). Education for sustainable development (ESD): Effects of sustainability education on pre-service teachers' attitude towards sustainable development (SD). *Journal of Cleaner Production*, 250(Query date: 2024-09-17 11:03:49). <https://doi.org/10.1016/j.jclepro.2019.119537>
- Noyes, J. A. (2022). Comparative Effectiveness of Training with Simulators Versus Traditional Instruction in Veterinary Education: Meta-Analysis and Systematic Review. *Journal of Veterinary Medical Education*, 49(1), 25–38. <https://doi.org/10.3138/JVME-2020-0026>
- Park, M. (2021). "Walking in the patient's shoes": An innovative training method using storytelling to promote knowledge transfer of patient-centered care in hospital: A quasi-experimental study. *Nurse Education in Practice*, 56(Query date: 2024-03-18 01:17:50). <https://doi.org/10.1016/j.nepr.2021.103199>
- Poppleton, A. (2020). Books: Researching Health: Qualitative, Quantitative and Mixed Methods. Third edition.: Filling in Your Research Knowledge Gaps. *The British journal of general practice : the journal of the Royal College of General Practitioners*, 70(692), 134–134. <https://doi.org/10.3399/bjgp20X708677>
- Sanaie, N. (2019). Comparing the effect of lecture and Jigsaw teaching strategies on the nursing students' self-regulated learning and academic motivation: A quasi-experimental study. *Nurse Education Today*, 79(Query date: 2024-09-17 11:03:49), 35–40. <https://doi.org/10.1016/j.nedt.2019.05.022>
- Sarikhani, Y. (2020). Analyzing the interaction of main components of hidden curriculum in medical education using interpretive structural modeling method. *BMC Medical Education*, 20(1). <https://doi.org/10.1186/s12909-020-02094-5>
- Sidhu, R. (2020). Curriculum for small-bowel capsule endoscopy and device-assisted enteroscopy training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*, 52(8), 669–686. <https://doi.org/10.1055/a-1185-1289>
- Stankovic, C. (2019). A National Patient Safety Curriculum in Pediatric Emergency Medicine. *Pediatric Emergency Care*, 35(8), 519–521. <https://doi.org/10.1097/PEC.0000000000001533>
- Yang, L. (2020). Curriculum Manager for Source Selection in Multi-source Domain Adaptation. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12359(Query date: 2024-09-17 11:03:49), 608–624. [https://doi.org/10.1007/978-3-030-58568-6\\_36](https://doi.org/10.1007/978-3-030-58568-6_36)
- Zaman, U. (2020). Linking transformational leadership and "multi-dimensions" of project success: Moderating effects of project flexibility and project visibility using PLS-SEM. *International*

*Journal of Managing Projects in Business*, 13(1), 103–127. <https://doi.org/10.1108/IJMPB-10-2018-0210>

Zwaan, G. L. van der. (2019). The role of personal characteristics, work environment and context in working beyond retirement: A mixed-methods study. *International Archives of Occupational and Environmental Health*, 92(4), 535–549. <https://doi.org/10.1007/s00420-018-1387-3>

---

**Copyright Holder :**

© Ni Wayan Karmini et.al (2024).

**First Publication Right :**

© International Journal of Language and Ubiquitous Learning

**This article is under:**

