

EFFECTIVENESS OF THE HYBRID LEARNING DESIGN MODULE BASED ON SALUAN LANGUAGE LOCAL WISDOM IN SCIENCE EDUCATION AT SDN 3 LUWUK

Yun Ratna Lagandesa^{1*}, Kadek Hariana², Asriani³,
Pahriadi⁴, Sisriawan Lapasere⁵

Abstract: The use of technology in education in Indonesia has been widely applied with the goal of improving educational quality. The hybrid learning virtual space is an attractive medium that can increase the appeal of learning and improve student learning outcomes. The learning process in the digital age requires educational media that combines physical and virtual spaces to provide a fun and interactive learning experience. The hybrid learning virtual space can be utilized by elementary school students and teachers for independent learning both online and offline. Digital age learning also refers to the knowledge of local wisdom and values related to the local community life. Local wisdom education can be developed by educational institutions according to regional potential and socio-cultural conditions. Therefore, the development of teaching materials in the form of a hybrid learning virtual space using digital media based on local wisdom by teachers becomes a solution in producing a creative and innovative project work. His study aims to evaluate the effectiveness of the hybrid learning module design based on Saluan language local wisdom in science education at SDN 3 Luwuk. The research method used was a quasi-experimental design with a pretest-posttest control group. Data were collected through achievement tests and student response questionnaires to the module. The study results show that the use of hybrid learning modules based on Saluan language local wisdom has a positive impact on student learning achievement and increases their interest in learning.

Keywords: Hybrid Learning, Local Wisdom, Saluan Language, Science Education, Module Effectiveness

Introduction

Digital technology has brought significant changes in various sectors of society, including the field of education in Indonesia. The use of technology in learning is expected to improve the quality of education and meet the demands of 21st-century competencies, namely digital competence. One way to develop digital competence is through the use of digital-based learning media. This is necessary because digital-based learning media have many advantages over traditional learning media, such as being accessible anytime and anywhere, interactive, and able to increase student motivation to learn.

In a study conducted by Septikasari and Frasandy (2018) titled "Improvement of 21st Century Skills Through the Use of Digital-Based Learning Media," it was found that the use of digital-based learning media can enhance 21st-century skills in students, such as critical thinking, creativity, communication, and collaboration. Furthermore, the use of digital-based learning

media can also increase interest and motivation in students. Therefore, teachers can use digital learning media to enhance student literacy.

Hybrid learning virtual space is an attractive medium that can increase the appeal of learning and improve student learning outcomes. According to Bax (2011), hybrid learning is a learning system that 'combines the advantages of using technology with the interpersonal interaction enabled by face-to-face learning.' According to Bliuc et al. (2010), hybrid learning can be defined as 'a learning process that integrates two modes of learning, namely technology-based learning and face-to-face learning, with the goal of enhancing the quality of learning.'

Sayuti, R., Darma, S., & Yusnita. (2020) in the journal *'The Effectiveness of Hybrid Learning Model in Learning during the COVID-19 Pandemic'* state that hybrid learning, which combines virtual space and physical classrooms, can enhance learning success. Hybrid learning offers a more flexible and up-to-date learning experience, and can improve interactions between students and teachers through the use of technology.

Digital age learning requires a concept that refers to knowledge, local wisdom, and values related to the life of the local community. Local wisdom is essential to be preserved and developed in education to enrich students' understanding of their culture and environment. According to Suseno (2014), local wisdom includes the beliefs, norms, values, and ethical systems adopted by a specific community. In the context of education, local wisdom is integrated into the curriculum as a form of recognition of cultural diversity and the development of students' character in community life (Maulana, 2015). Education based on local wisdom helps students develop their cultural identity and enhances their love and care for local culture. Local wisdom, such as the Saluan language, is important to be preserved and integrated into the curriculum to enrich students' cultural understanding.

Science education in elementary schools often requires media that can make scientific concepts more easily understood by students. The hybrid learning approach, which combines face-to-face and online learning, can be an effective solution. By integrating local wisdom into the hybrid learning module, it is hoped that students will not only understand the science material but also appreciate their local culture.

Setiawan (2019) asserts that science education in elementary schools should be conducted with a scientific approach. The scientific approach is based on the development of scientific process skills and the understanding of scientific concepts. In this approach, students are invited to understand science through direct involvement in the processes of observation, experimentation, analysis, and making conclusions based on the data obtained. Meanwhile, according to Suyanto (2017), science education in elementary schools should be developed based on a constructivist approach. The constructivist approach is based on the concept that students construct their knowledge and understanding through direct experience and reflection on that experience. In science education, students are encouraged to explore and observe directly, as well as to pose questions and formulate hypotheses based on those experiences.

This research aims to develop the Design of a Hybrid Learning Module Based on Local Wisdom of Saluan Language for Science Education at SDN 3 Luwuk. The goal is to assist teachers in delivering thematic learning, especially in science, by utilizing digital-based applications, primarily in student project creation. Additionally, local wisdom at SDN 3 Luwuk is incorporated by implementing local wisdom-based learning, which includes the use of the Saluan language as one of the native languages of the Banggai district.

Research Method

This study employed a quasi-experimental method with a pretest-posttest control group design. The population of the study consisted of fourth-grade students at SDN 3 Luwuk, with samples from two randomly selected classes. The experimental class used a hybrid learning module based on the local wisdom of the Saluan language, while the control class used conventional methods. Data on learning achievement were obtained through tests, while student response data to the module were collected through questionnaires.

Result and Discussion

This study was conducted to evaluate the effectiveness of the hybrid learning module design based on local wisdom of Saluan language in science education at SDN 3 Luwuk. The pretest results showed that the average scores of students in both the experimental and control classes were not significantly different, with average scores of 65 and 64, respectively. However, after the intervention using the hybrid learning module based on local wisdom, the average posttest score in the experimental class increased to 85, while the control class only increased to 70. A t-test was used to test the hypothesis of whether there was a significant difference between the posttest results of the two classes. The results of the t-test showed a p-value of less than 0.05, indicating a significant difference in student learning achievement between those using the hybrid learning module based on local wisdom and those using conventional methods.

The significant improvement in the posttest scores of students in the experimental class demonstrates that the hybrid learning module based on local wisdom of the Saluan language is effective in enhancing learning achievement. This aligns with previous research which states that learning that integrates local culture can improve student engagement and understanding (Miarso, 2004).

This hybrid learning module successfully contextualizes science materials using local language and culture, making it easier for students to understand. The local context familiar to the students helps them relate scientific concepts to everyday life.

Based on interviews with teachers, those in the experimental class stated that the hybrid learning module based on the local wisdom of the Saluan language made it easier for them to deliver material because students were more enthusiastic and found it easier to understand the concepts taught. Teachers also mentioned that this approach assists in teaching local cultural values to students. Consistent with observation results, researchers noted that the use of local

language and stories within the module helped students connect new knowledge with their daily experiences. This strengthens their understanding and makes learning more contextual.

Interviews with students revealed that using stories and examples related to the local culture of the Saluan language made learning more relevant and easier to understand. Some students expressed that they felt more valued and motivated because the material studied was related to their own culture.

The use of the hybrid learning module also helps to enhance students' digital literacy. They become more accustomed to using technology devices for learning, which is an essential skill in today's digital era. Technology enables more interactive and engaging material delivery. Videos, animations, and simulations used in the module help students more easily understand complex science concepts.

The integration of local wisdom in the module helps students better understand the material because they can connect it with the knowledge and experience they already possess. Moreover, this approach also teaches students to appreciate their own culture more. They feel that their culture is valued and recognized within the context of formal learning.

Conclusion

The design of the hybrid learning module based on local wisdom of the Saluan language is effective in enhancing learning achievement and student interest in science education at SDN 3 Luwuk. This module not only improves academic understanding but also integrates important local cultural values for the development of student character. The use of technology in the hybrid learning module also helps enhance students' digital literacy, which is an essential skill in this modern era.

References

- Sayuti, R., Darma, S., & Yusnita. (2020). The Effectiveness of Hybrid Learning Model in Learning during the COVID-19 Pandemic. *Journal of Physics: Conference Series*, 1567(4), 042063
- Septikasari, D., & Frasandy, R. (2018). Peningkatan Keterampilan Abad 21 Melalui Pemanfaatan Media Pembelajaran Berbasis Digital. *Jurnal Pembelajaran Abad 21*, 1(1), 1-11.
- Bliuc, A. M., Goodyear, P., & Ellis, R. A. (2010). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education*, 13(1-2), 128-134. <https://doi.org/10.1016/j.iheduc.2009.10.006>
- Bax, S. (2011). Normalisation revisited: The effective use of technology in language education. *International Journal of Computer-Assisted Language Learning and Teaching*, 1(2), 1-15. <https://doi.org/10.4018/978-1-60566-789-3.ch004>
- Suyanto, E. (2017). Pengembangan Pembelajaran IPA di Sekolah Dasar. *Jurnal Pendidikan Dasar*, 18(1), 33-40. <https://doi.org/10.17509/jpd.v1i1.6464>

- Setiawan, A. (2019). Penerapan pendekatan saintifik dalam pembelajaran IPA untuk meningkatkan keterampilan proses sains siswa SD. *Jurnal Ilmiah Pendidikan Dasar*, 6(2), 90-99. <https://doi.org/10.25273/jipd.v6i2.4845>
- Maulana, R. (2015). Integrasi Kearifan Lokal dalam Pembelajaran Sejarah di Sekolah Menengah Atas. *Jurnal Sejarah*.
- Miarso, Y. (2004). *Menembus Batasan: Paradigma Baru Pendidikan Nasional*. Jakarta: PT. Rineka Cipta.