



THE TRANSITION FROM CONVENTIONAL TO INTERACTIVE TEACHING METHODS TO ENHANCE PARTICIPATION AND UNDERSTANDING AMONG ELEMENTARY SCHOOL STUDENTS

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Abstract

The transformation of teaching methods from conventional to interactive has become a critical issue in improving the quality of learning in elementary schools, particularly in the context of 21st-century learning demands and the implementation of the Merdeka Curriculum. This study aims to analyze the process of transforming teaching methods and their impact on student participation and understanding. The study employed a qualitative case study design at SD NU Sekaran, involving the principal, teachers, students, and educational staff as informants. Data collection techniques included observation, in-depth interviews, and documentation, with data analysis conducted through reduction, presentation, and drawing of conclusions. The results indicate that instruction is still dominated by conventional methods; however, the implementation of interactive methods—such as group discussions and visual media—significantly enhances student engagement and understanding. Supporting factors include a conducive school environment and the principal's support, while barriers include limited facilities and teachers' readiness. Thus, interactive learning has been shown to have great potential for improving the quality of the learning process and outcomes, and therefore needs to be developed systematically and sustainably.

Keywords: Conventional Methods, Elementary School, Interactive Learning, Student Participation, Student Understanding.

A. INTRODUCTION

The shift from conventional teaching methods to interactive learning is a strategic issue in the development of basic education in today's digital age.¹ This change is driven not only by advancements in information and communication technology but also by curriculum requirements that prioritize student-centered learning.² In practice, conventional learning—which tends to be one-way, lecture-heavy, and teacher-centered—is seen as inadequate for

¹ Oleksandr Blyznyuk et al., "Quality Education in the Digital Age: Adapting to 21st Century Primary School Learners," *Journal of Vasyl Stefanyk Precarpathian National University* 12, no. 1 (2025): 58–68, <https://doi.org/10.15330/jpnu.12.1.58-68>; Anoop Pandey et al., "New Age Teaching Pedagogy: Innovative Teaching Methods and Their Impact on Educational Performance of the Students," in *Redefining Virtual Teaching Learning Pedagogy*, 1st ed., ed. Rohit Bansal et al. (Wiley, 2023), <https://doi.org/10.1002/9781119867647.ch4>.

² Nurassyl Kerimbayev et al., "A Student-Centered Approach Using Modern Technologies in Distance Learning: A Systematic Review of the Literature," *Smart Learning Environments* 10, no. 1 (2023): 61, <https://doi.org/10.1186/s40561-023-00280-8>.

accommodating students' increasingly complex and dynamic learning needs.³ In contrast, interactive learning offers a more participatory, collaborative, and contextual approach, thereby increasing student engagement in the learning process.⁴ Various studies show that the use of interactive media—such as educational games, e-modules, and digital platforms—can boost the motivation and interest of elementary school students in learning.⁵ This highlights the urgency of conducting a more in-depth examination of the transformation of teaching methods as an effort to improve the quality of basic education. Furthermore, this paradigm shift also serves as a response to the growing importance of digital literacy in 21st-century life.⁶ Consequently, the transformation of learning has become one of the primary focuses of national education policy.

In the context of Indonesia's education policy, the implementation of the Merdeka Curriculum serves as a crucial foundation for driving educational transformation.⁷ This curriculum emphasizes the principles of differentiation, project-based learning, and the integration of digital technology into the learning process.⁸ As a result, learning is no longer merely the transfer of knowledge but also a means of developing critical, creative, and collaborative thinking skills.⁹ The literature indicates that this approach aligns with the concept of student-centered learning, which positions students as active participants in the learning process.¹⁰ However, the implementation of this curriculum still faces various challenges, particularly regarding teachers' readiness to adopt technology and develop interactive learning

³ Hossain Koolivand et al., "Comparison of the Effectiveness of Virtual Reality-Based Education and Conventional Teaching Methods in Dental Education: A Systematic Review," *BMC Medical Education* 24, no. 1 (2024): 8, <https://doi.org/10.1186/s12909-023-04954-2>.

⁴ Tracey Muir et al., "Using Interactive Online Pedagogical Approaches to Promote Student Engagement," *Education Sciences* 12, no. 6 (2022): 415, <https://doi.org/10.3390/educsci12060415>; Sharmini Gopinathan et al., "The Role of Digital Collaboration in Student Engagement towards Enhancing Student Participation during COVID-19," *Sustainability* 14, no. 11 (2022): 6844, <https://doi.org/10.3390/su14116844>.

⁵ Johni E. Putra et al., "The Urgency of Digital Technology in Education: A Systematic Literature Review," *Jurnal Educatio Jurnal Pendidikan Indonesia* 10, no. 1 (2024): 224, <https://doi.org/10.29210/1202423960>; Mahmudah Mahmudah and Luthfi Yasykur, "Implikasi Pembelajaran Daring (Online Learning) Pada Pembelajaran PAI," *Al-Murabbi Jurnal Studi Kependidikan Dan Keislaman* 8, no. 2 (2022): 1–11, <https://doi.org/10.53627/jam.v8i2.4512>; Hasnawiyah Hasnawiyah and Maslena Maslena, "Dampak Penggunaan Media Pembelajaran Interaktif Terhadap Prestasi Belajar Sains Siswa," *Jurnal Review Pendidikan Dasar Jurnal Kajian Pendidikan Dan Hasil Penelitian* 10, no. 2 (2024): 167–72, <https://doi.org/10.26740/jrpd.v10n2.p167-172>; Kenny K. Pradita et al., "Konten E-Learning Dalam Pembelajaran Bahasa Bali Pada Era Revolusi Industri 4.0," *Indonesian Journal of Instruction* 3, no. 1 (2022): 25–33, <https://doi.org/10.23887/iji.v3i1.31134>.

⁶ María Cristina Martínez-Bravo et al., "Dimensions of Digital Literacy in the 21st Century Competency Frameworks," *Sustainability* 14, no. 3 (2022): 1867, <https://doi.org/10.3390/su14031867>; Songkran Janthapassa et al., "THE ROLE OF DIGITAL LITERACY IN SHAPING EDUCATION IN THE NEXT-NORMAL," *Asian Education and Learning Review* 2, no. 1 (2024): 29–41, <https://doi.org/10.14456/aclr.2024.3>.

⁷ Muhammad hifdhul Islam Qur'aniy Zidna et al., "Transformasi Pembelajaran Berbasis Kurikulum Merdeka Melalui Pendekatan Konstruktivistik," *Andragogi: Jurnal Pendidikan Dan Pembelajaran* 5, no. 2 (2025): 152–69, <https://doi.org/10.31538/adrg.v5i2.2108>.

⁸ Maisa Mielikäinen, "Towards Blended Learning: Stakeholders' Perspectives on a Project-Based Integrated Curriculum in ICT Engineering Education," *Industry and Higher Education* 36, no. 1 (2022): 74–85, <https://doi.org/10.1177/0950422221994471>.

⁹ Burhanudin Abdul Karim Mantau and Sitti Rahmawati Talango, "PENGINTEGRASIAN KETERAMPILAN ABAD 21 DALAM PROSES PEMBELAJARAN (LITERATURE REVIEW)," *Irfani* 19, no. 1 (2023): 86–107, <https://doi.org/10.30603/ir.v19i1.3897>.

¹⁰ Durroh N. Ummah and Nadlir Nadlir, "Konsep Kurikulum Merdeka Dan Integrasi Media Pembelajaran Berbasis Digital Pada Jenjang Sekolah Dasar," *Elementeris Jurnal Ilmiah Pendidikan Dasar Islam* 5, no. 1 (2023): 26–38, <https://doi.org/10.33474/elementeris.v5i1.18907>; Putra et al., "The Urgency of Digital Technology in Education: A Systematic Literature Review."

materials.¹¹ Mahmudah and Yasykur emphasize that learning transformation requires changes not only in the learning materials but also in the overall design of instruction.¹² This indicates that the success of learning transformation depends heavily on the readiness of the education system as a whole.

Theoretically, the shift in learning from conventional to interactive methods is grounded in the constructivist paradigm, which emphasizes students' active engagement in constructing knowledge.¹³ From this perspective, learning is viewed as an active process in which students construct their understanding through experience and interaction with their environment.¹⁴ This approach is reinforced by the concept of Realistic Mathematics Education (RME), which emphasizes the use of real-world contexts in learning.¹⁵ This approach is reinforced by the concept of Realistic Mathematics Education (RME), which emphasizes the use of real-world contexts in learning. Thus, interactive learning not only increases student engagement but also deepens their understanding of concepts in a meaningful way. Research shows that the use of multimedia-based interactive media can significantly enhance students' creativity and learning outcomes.¹⁶ This demonstrates that the transformation of teaching methods has a strong theoretical foundation and is relevant to the needs of modern education.

On the other hand, advances in digital technology have opened up significant opportunities for the development of interactive learning media. Various innovations, such as Augmented Reality (AR), Virtual Reality (VR), and web-based learning platforms, have been used to enhance learning quality in elementary schools.¹⁷ Dewi et al. and Dendodi et al. demonstrate that the use of AR can enhance student motivation and understanding through more concrete visualizations of concepts.¹⁸ In addition, gamification platforms such as Kahoot

¹¹ Ida Triwahyuni et al., "Pengembangan Kompetensi Digital Guru Dalam Implementasi Kurikulum Merdeka Di Sekolah Dasar: Studi Kasus Di SDN Bandung 1," *Kalam Cendekia: Jurnal Ilmiah Kependidikan* 13, no. 1 (2025), <https://doi.org/10.20961/jkc.v13i1.97013>; Mutia Dewi et al., "Tantangan Implementasi Kurikulum Di Era Digital: Kesiapan Guru Dan Infrastruktur," *Innovative: Journal Of Social Science Research* 5, no. 4 (2025): 10732–41, <https://doi.org/10.31004/innovative.v5i4.20987>.

¹² Mahmudah and Yasykur, "Implikasi Pembelajaran Daring (Online Learning) Pada Pembelajaran PAI."

¹³ Fifi Risana et al., "TRANSFORMASI METODE PEMBELAJARAN PENDIDIKAN AGAMA ISLAM: DARI KONVENSIIONAL KE PENDEKATAN STUDENT-CENTERED LEARNING," *Pendas : Jurnal Ilmiah Pendidikan Dasar* 10, no. 01 (2025): 619–32, <https://doi.org/10.23969/jp.v10i01.23618>.

¹⁴ Pande Made Aditya Pramana et al., "Relevansi Teori Belajar Konstruktivisme dengan Model Inkuiri Terbimbing terhadap Hasil Belajar Siswa," *Ideguru: Jurnal Karya Ilmiah Guru* 9, no. 2 (2024): 487–93, <https://doi.org/10.51169/ideguru.v9i2.875>.

¹⁵ Isna Istiqomah and Aan Widiyono, "Implementasi Pendekatan Realistic Mathematics Education Di Sekolah Dasar (Studi Literatur)," *Indo-Mathedu Intellectuals Journal* 4, no. 3 (2023): 1824–31, <https://doi.org/10.54373/imeij.v4i3.436>.

¹⁶ Adi Asmara et al., "Media Pembelajaran Berbasis Teknologi: Apakah Memiliki Pengaruh Terhadap Peningkatan Kreativitas Pada Anak Usia Dini?," *Jurnal Obsesi Jurnal Pendidikan Anak Usia Dini* 7, no. 6 (2023): 7253–61, <https://doi.org/10.31004/obsesi.v7i6.5728>; Pradita et al., "Konten E-Learning Dalam Pembelajaran Bahasa Bali Pada Era Revolusi Industri 4.0"; Alfa D. Putra and Hasna Salsabila, "Pengaruh Media Interaktif Dalam Perkembangan Kegiatan Pembelajaran Pada Instansi Pendidikan," *Inovasi Kurikulum* 18, no. 2 (2021): 231–41, <https://doi.org/10.17509/jik.v18i2.36282>.

¹⁷ Siti Fatimah et al., "INOVASI DALAM PENGAJARAN IPA DI SEKOLAH DASAR MELALUI PENGGUNAAN TEKNOLOGI DIGITAL," *MUBTADI: Jurnal Pendidikan Ibtidaiyah* 6, no. 1 (2024): 15–27, <https://doi.org/10.19105/mubtadi.v6i1.14271>.

¹⁸ Agustina K. Dewi et al., "Potensi Media Pendukung Belajar Pra-Aksara Berbasis Augmented Reality Dalam Meningkatkan Literasi Digital Anak Usia Dini," *Candrarupa Journal of Art Design and Media* 3, no. 2 (2024): 106–12, <https://doi.org/10.37802/candrarupa.v3i2.820>; Dendodi Dendodi et al., "Analisis Penerapan Augmented Reality Dalam Meningkatkan Efektifitas Pembelajaran Sains Di Era Digital," *Alacrity Journal of Education*, 2024, 293–304, <https://doi.org/10.52121/alacrity.v4i3.456>.

have also proven effective in increasing student participation in learning.¹⁹ However, the implementation of these technologies still faces challenges, particularly regarding infrastructure limitations and teachers' digital literacy. Therefore, educational transformation requires not only technological innovation but also systemic support, including teacher training and adequate facilities.

Although various studies point to the potential of interactive learning, empirical findings suggest that its effectiveness is not universal.²⁰ Some studies indicate that, in certain contexts, conventional learning still has advantages, particularly for material that requires direct and in-depth explanation.²¹ This suggests that educational transformation must be carried out in an adaptive and contextual manner, taking into account the characteristics of students, the subject matter, and the learning environment. In other words, a blended learning approach that combines conventional and interactive methods is a more realistic solution for implementation in the field. This approach allows for flexibility in learning and provides teachers with the freedom to tailor instructional strategies to students' needs.

Furthermore, instructional design is also a key factor in the success of transforming teaching methods. The use of design models such as MDLC, ADDIE, and 4D enables the systematic and structured development of interactive instructional media.²² These models emphasize the importance of the analysis, design, development, implementation, and evaluation stages in producing valid and effective instructional media. Thus, the transformation of learning depends not only on the use of technology but also on the quality of the underlying instructional design. Research shows that well-designed learning media can significantly improve student engagement and learning outcomes. Therefore, developing teachers' competencies in instructional design is a crucial aspect that must be addressed.

Based on the literature review presented, a research gap exists that needs to be addressed. Most previous studies have focused more on developing interactive learning media or on quantitatively testing their effectiveness. However, there are still a few studies that examine in depth how teaching method transformation occurs in real-world elementary school contexts, particularly regarding teacher-student interactions and the dynamics of implementation in the field. Furthermore, research integrating character-building aspects with

¹⁹ Muh. R. Mattawang and Edy Syarif, "Dampak Penggunaan Kahoot Sebagai Platform Gamifikasi Dalam Proses Pembelajaran," *The Journal of Learning and Technology* 2, no. 1 (2023): 33-42, <https://doi.org/10.33830/jlt.v2i1.5843>; Hasnawiyah and Maslena, "Dampak Penggunaan Media Pembelajaran Interaktif Terhadap Prestasi Belajar Sains Siswa."

²⁰ Siti Lulu Lutfiah et al., "Efektivitas Penggunaan Kahoot Sebagai Alat Evaluasi Pembelajaran IPAS Materi Rantai Makanan Di Sekolah Dasar," *Jurnal Inovasi Dan Teknologi Pendidikan* 3, no. 3 (2025): 298-314, <https://doi.org/10.46306/jurinotep.v3i3.123>.

²¹ Cecep Y. Sunendar and Ridwan Kamaluddin, "Implementasi Perangkat Lunak Sebagai Media Edukasi Bantuan Hidup Dasar: A Literature Review," *Holistik Jurnal Kesehatan* 18, no. 1 (2024): 44-53, <https://doi.org/10.33024/hjk.v18i1.220>; Mahmudah and Yasykur, "Implikasi Pembelajaran Daring (Online Learning) Pada Pembelajaran PAI"; Rizqi F. Naryanto et al., "Media Pembelajaran Kendaraan Bermotor Berbasis Permainan Virtual Reality Di SD Negeri Barusari 02 Semarang Selatan," *Jurnal Atma Inovasia* 4, no. 4 (2024): 171-76, <https://doi.org/10.24002/jai.v4i4.9487>.

²² Siti N. Mu'arivah et al., "Pengembangan Media Pembelajaran Interaktif Berbasis Scratch Pada Pemrograman Web Untuk Siswa SMK," *Teknois Jurnal Ilmiah Teknologi Informasi Dan Sains* 14, no. 1 (2024): 56-65, <https://doi.org/10.36350/jbs.v14i1.229>; Shaumy D. Inrafa et al., "Pengembangan Media Puzzle Interaktif Untuk Pengenalan Huruf Pada Anak Usia 5-6 Tahun Di Taman Kanak-Kanak," *Indo-Mathedu Intellectuals Journal* 5, no. 6 (2024): 6649-54, <https://doi.org/10.54373/imeij.v5i6.2066>; Hebron Pardede et al., "Pengembangan E-Book Interaktif Fisika Kelas XII Berbasis Web Dan Android Dengan Pendekatan Multirepresentasi," *Jiip - Jurnal Ilmiah Ilmu Pendidikan* 7, no. 2 (2024): 1983-86, <https://doi.org/10.54371/jiip.v7i2.3287>; Putra and Salsabila, "Pengaruh Media Interaktif Dalam Perkembangan Kegiatan Pembelajaran Pada Instansi Pendidikan."

interactive learning remains relatively limited. Therefore, this study offers a novel approach by examining the holistic transformation of teaching methods, taking into account the pedagogical, technological, and sociocultural aspects of the school context.

Taking these aspects into consideration, this study aims to analyze the transformation of teaching methods from conventional to interactive methods to enhance elementary school students' participation and understanding. This study is expected to provide a theoretical contribution to the development of a contextual and adaptive interactive learning model, as well as a practical contribution to teachers and policymakers in improving the quality of learning in elementary schools. Furthermore, this study is also expected to serve as a reference for the development of educational policies that are more responsive to the needs of the digital age. The research question for this study is: How can transforming teaching methods from conventional to interactive methods enhance elementary school students' participation and understanding during classroom implementation?

B. RESEARCH METHODS

This study employs a qualitative case study design to gain an in-depth understanding of the process of transforming teaching methods from conventional to interactive in a real-world context at an elementary school. This approach was chosen because it allows for a holistic, contextual, and in-depth exploration of the phenomena related to teaching practices taking place in the field. The research focuses on the interaction between teachers and students, the learning strategies employed, and the dynamics of implementing interactive media in the learning process. The case study design allows the researcher to comprehensively explore various aspects influencing the transformation of learning, including supporting and hindering factors that emerge during the process. Thus, this study not only describes the phenomenon but also provides a broader understanding of the social, cultural, and pedagogical contexts underlying it. The choice of this approach is also driven by the need to capture complex empirical realities that cannot be quantified. Therefore, qualitative methods are considered most appropriate for achieving the objectives of this study. Additionally, this approach provides researchers with the flexibility to develop data collection instruments and techniques tailored to field conditions.

The research subjects in this study included school principals, classroom teachers, students, and educational staff directly involved in the learning process at the elementary school where the research was conducted. Subjects were selected using purposive sampling, based on their active involvement in the implementation of instruction and their ability to provide relevant and in-depth information. The selected teachers are those who have applied a variety of teaching methods—both conventional and interactive—thereby providing a clear comparative overview. The participating students come from diverse backgrounds, both in terms of academic ability and socioeconomic status, ensuring they represent real-world classroom conditions. Additionally, school principals and educational staff were selected to provide policy perspectives and insights into institutional support for the learning process. The number of participants was determined by data saturation, which occurred when the information obtained became repetitive, and no new significant findings were identified. Thus, the sample in this study was flexible and evolved as the research needs evolved.

The research instruments used in this study included an in-depth interview guide, an observation sheet, and documentation as supporting data sources. The interview guide was designed to be semi-structured to allow for broader data exploration while maintaining focus on the research objectives. The observation sheet was used to record learning activities

directly, including interactions between teachers and students, the use of learning media, and students' responses to the methods employed. Documentation included photographs of learning activities, interview recordings, and school records relevant to the research, such as learning materials and activity reports. All instruments were developed based on the research focus and adapted to the field context to ensure the validity and relevance of the data obtained. In addition, the researcher also used field notes to record reflections and preliminary interpretations during the data collection process. This combination of various instruments aims to yield comprehensive and in-depth data.

The data collection procedure in this study was carried out through several systematic stages. The first stage involved obtaining research permission by submitting a permission letter to the school administration, as required by research ethics. The second stage consisted of preliminary observations to understand the school's general conditions and ongoing learning processes. The third stage involved in-depth interviews with teachers, the principal, and students to gather information regarding their experiences and perceptions of the teaching methods used. The fourth stage involved direct classroom observation to assess the implementation of teaching methods. The fifth stage involved collecting documentation as supporting data. The entire data collection process was carried out in stages and repeatedly to ensure the accuracy and depth of the data. In addition, the researcher also triangulated sources and techniques to enhance data validity. Thus, the data obtained is reliable and reflects the actual conditions.

The data analysis method in this study employed qualitative analysis techniques, including data reduction, data presentation, and drawing conclusions. Data reduction involved selecting, simplifying, and organizing data relevant to the research focus. Data presentation took the form of a systematic descriptive narrative, thereby facilitating understanding of the research findings. Drawing conclusions was carried out in stages by identifying patterns, themes, and relationships between variables that emerged from the data. The analysis process was conducted simultaneously with data collection, allowing the researcher to reflect and make adjustments throughout the study. In addition, the researcher also used triangulation techniques to ensure data validity, both through comparisons between sources and between methods. Data validity was further strengthened through member checks, which involved seeking confirmation from participants regarding the interview results and the researcher's interpretations. Consequently, the analysis results are highly credible and scientifically sound.

C. RESULTS AND DISCUSSION

The results of this study were obtained through a data collection process involving a number of informants, including the school principal, classroom teachers, students, and educational staff at the research site, namely SD NU Sekaran. The total number of informants in this study was 12, consisting of 1 school principal (SP), 4 classroom teachers (T1, T2, T3, T4), 6 students (S1, S2, S3, S4, S5, S6), and 1 educational staff member (ES). All informants were selected based on their direct involvement in the classroom learning process. The conditions at the research site indicate that the school has a fairly representative physical environment with a strong religious atmosphere, supported by well-equipped classrooms, a beautiful schoolyard, and harmonious social interactions between teachers and students. Learning activities take place in classrooms with an average of 25–30 students per class, using a combination of lectures, discussions, and simple learning media.

The observational data indicate that the learning process remains dominated by conventional methods, particularly lectures. Teachers tend to explain the material verbally to

the class, while students listen and take notes. In some learning sessions, teachers began integrating visual media, such as images and short videos. Based on the observation notes, student engagement appeared to increase when visual media were used. For example, in the observed science learning session, the teacher (G2) used a 5-minute instructional video, and students responded actively by asking questions. One student (S3) stated:

“If there’s a video, it’s easier for me to understand because I can see the example right away.”

However, in another session that relied solely on the lecture method, some students appeared to be unfocused, with a few talking among themselves or not paying attention to the teacher’s explanation.

The results of teacher interviews indicate variations in the use of teaching methods. Teacher (G1) stated that the lecture method remains the primary choice because it is considered easier and more efficient for conveying material. This statement is supported by the following interview excerpt:

“If we use lectures, we can cover the material quickly, but sometimes the students aren’t very engaged.”

Meanwhile, Teacher (G3) noted that the use of interactive media remains limited due to a lack of facilities and preparation time. Teacher (G3) stated:

“I’d like to use more engaging media, but sometimes I’m limited by the tools and time needed to prepare them.”

On the other hand, the teacher (G4) began trying an interactive approach by involving students in group discussions. Based on observations, this method resulted in higher levels of participation than the lecture method.

Data from the students indicate that they prefer interactive learning. Of the six students interviewed, five stated that they prefer learning that involves activities such as discussions, games, or the use of visual media. One student (S1) stated:

“If you learn through discussion or by using pictures, you won’t get bored.”

Another student (S5) added:

“If I just listen, I sometimes don’t understand.”

These data indicate that the level of student engagement varies depending on the teaching method used. During interactive lessons, students appear to be more active in asking questions, answering, and participating in classroom activities.

The following is a summary of the findings from observations regarding teaching methods and student engagement:

Table 1. Findings from Observations of Teaching Methods and Student Engagement

Informant Code	Teaching Methods	Forms of Student Engagement	Student Responses
G1	Lecture	Listening, taking notes	Passive
G2	Video + lecture	Asking questions, casual discussion	Fairly active
G3	Lecture	Listening	Less active
G4	Group discussion	Discussions, presentations	Active

In addition, field documentation shows the use of learning materials such as textbooks, whiteboards, and some simple visual aids. There was no evidence of regular use of technology-based media such as digital applications or interactive devices. Photos of learning activities show that most remain teacher-centered, with the teacher at the front of the classroom. However, in some documentation of group discussion activities, students can be seen sitting in groups and discussing with one another.

The results of interviews with the school principal (SP) indicate that the school supports learning innovations but acknowledges limitations in facilities. The SP stated:

“We encourage teachers to innovate, but our resources are still limited.”

In addition, educational staff (TK) noted that administrative support for learning is already in place, but has not yet been specifically directed toward the development of interactive media. Statement from TK:

“We provide administrative support, but the choice of teaching materials is still up to each teacher.”

The observational data also showed that teacher-student interactions were quite communicative, especially in classes that used interactive methods. In classes that used group discussions, students appeared to interact more actively not only with the teacher but also with their peers. In contrast, in classes using the lecture method, interactions tended to be one-way, from the teacher to the students. Field notes indicate that during a 35-minute lecture, only 2 students asked questions, whereas during a group discussion, more than 10 students were actively engaged.

In terms of student understanding, data were collected through observations and student statements. In lessons using interactive methods, students were able to rephrase the material in their own words. For example, student (S2) stated:

“I can explain it again because we just discussed it with our friends.”

Meanwhile, in conventional learning, some students have difficulty understanding the material. Student (S4) stated:

“Sometimes I forget because I’m just listening.”

These data indicate differences in students' responses to the teaching methods used.

In addition, factors that support learning include support from the principal, a conducive school environment, and teachers' commitment to teaching. Barriers to learning include limited facilities, limited instructional time, and variations in student ability. Based on interview data, Teacher 2 (G2) stated:

“If the facilities were more complete, we might be able to use interactive media more often.”

Meanwhile, teacher (G1) noted that differences in students' abilities also pose a challenge when implementing interactive methods.

Overall, the research data indicate a variety of teaching methods in the classroom, with conventional methods predominating and a small proportion of interactive methods. Student engagement varied by method, with a tendency toward higher engagement in interactive learning. The data from observations, interviews, and documentation reveal a consistent pattern in the relationship between teaching methods and student responses during classroom learning.

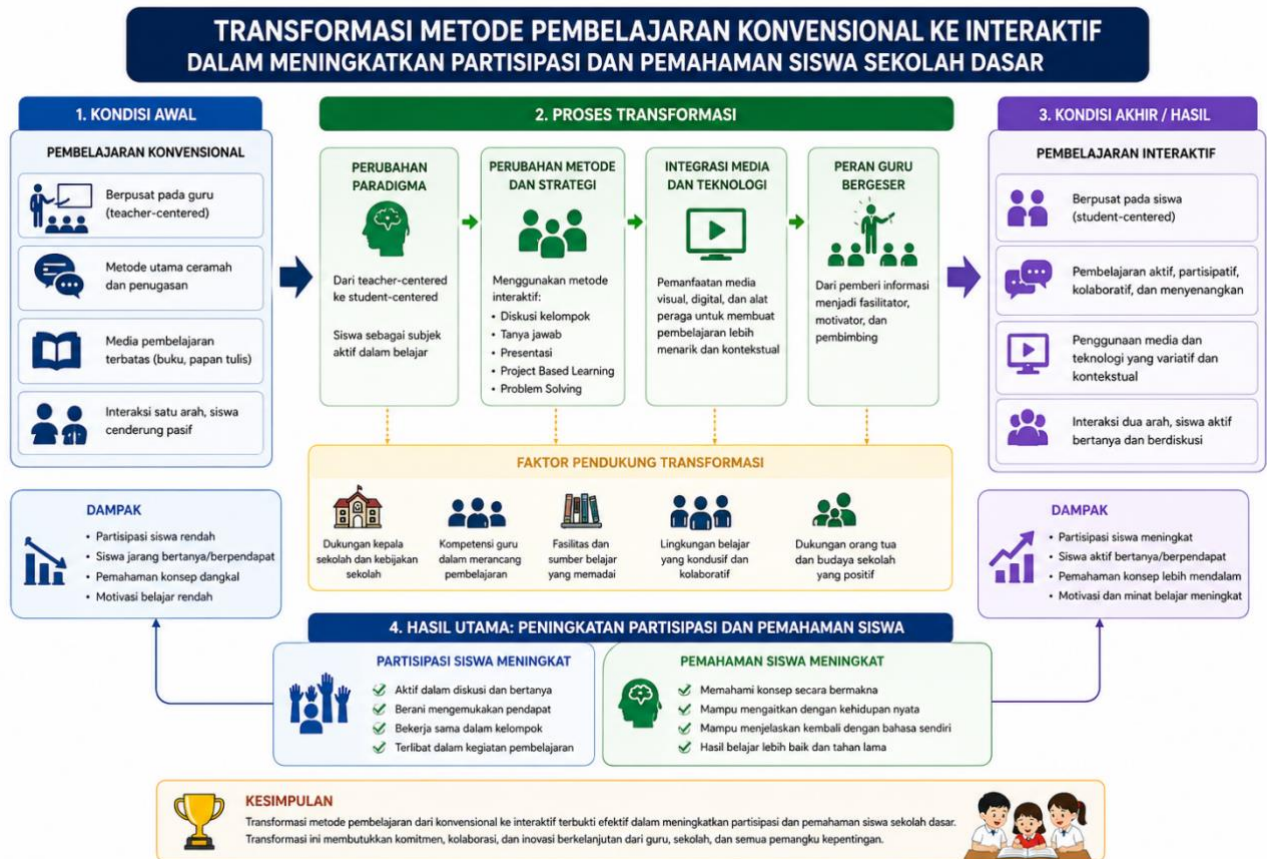


Figure 1. The Shift from Conventional to Interactive Teaching Methods to Enhance Participation and Understanding Among Elementary School Students

The findings of this study indicate that the shift from conventional to interactive teaching methods in elementary schools has not yet been fully optimized, although there are early signs of such a change. The continued dominance of the lecture method in teaching practices suggests that the traditional learning paradigm remains deeply ingrained in teachers' pedagogical practices. This aligns with previous findings that conventional teaching is still widely used because it is considered efficient for delivering content, despite its limitations in fostering student participation.²³ In this context, the transformation of learning is not only about changing methods but also about shifting teachers' paradigms so that they view the learning process as an active activity that fully engages students. Thus, these findings reinforce the argument that pedagogical change is not an instantaneous process but rather one that requires systemic and sustained support.

Furthermore, the findings indicate that when interactive learning methods are implemented, there is a significant increase in student participation and engagement. This is evident from the increased number of students who actively ask questions, participate in discussions, and are able to express their opinions during the learning process. These findings are consistent with the literature, which states that interactive learning—particularly that involving digital media and collaborative activities—can enhance student motivation and engagement.²⁴ Theoretically, this can be explained through the constructivist perspective,

²³ Mahmudah and Yasykur, "Implikasi Pembelajaran Daring (Online Learning) Pada Pembelajaran PAI."

²⁴ Putra et al., "The Urgency of Digital Technology in Education: A Systematic Literature Review"; Hasnawiyah and Maslena, "Dampak Penggunaan Media Pembelajaran Interaktif Terhadap Prestasi Belajar Sains Siswa"; Mattawang and Syarif, "Dampak Penggunaan Kahoot Sebagai Platform Gamifikasi Dalam Proses Pembelajaran."

which emphasizes that knowledge is constructed through active interaction between individuals and their learning environment.²⁵ Thus, interactive learning not only increases students' physical activity but also stimulates deeper cognitive processes.

With regard to student understanding, the research findings indicate that interactive methods enable students to understand the material better than conventional methods. Students who participate in group discussions or visual media-based learning are able to rephrase the material in their own words, indicating a stronger conceptual understanding. These findings are consistent with research showing that the use of interactive media—such as e-modules, educational games, and multimedia—can improve students' conceptual understanding and learning outcomes.²⁶ From a cognitive theory perspective, this indicates that interactive learning facilitates the processes of elaboration and integration of information, thereby leading to a deeper understanding. Therefore, changes in teaching methods have direct implications for the quality of student learning outcomes.

However, the findings of this study also reveal limitations in the implementation of interactive learning, particularly regarding teacher readiness and the availability of infrastructure. Teachers reported that limited facilities and time constraints were the main obstacles to developing innovative learning materials. These findings are consistent with the literature, which emphasizes that the success of learning transformation depends heavily on teacher competence and technological support.²⁷ In this context, the transformation of learning cannot be separated from efforts to build teachers' capacity through training and professional development. In addition, the provision of adequate infrastructure is also an important prerequisite for supporting the sustainable implementation of interactive learning.

Furthermore, this study's findings reveal that students' preference for interactive learning is a key indicator of the success of learning transformation. Most students reported being more engaged and finding it easier to understand the material when learning was interactive. This indicates that interactive learning impacts not only students' cognitive aspects but also their affective aspects. The literature shows that motivation and interest in learning are important factors influencing learning success.²⁸ Thus, transforming teaching methods can be viewed as a strategy for holistically improving the quality of students' learning experiences.

On the other hand, the findings of this study also indicate that conventional teaching still has its place in certain contexts. Some teachers stated that the lecture method is still necessary for presenting material that is complex or requires direct explanation. These findings are consistent with the literature, which states that no single teaching method is universally superior in all contexts, and that the effectiveness of a method depends heavily on the

²⁵ Istiqomah and Widiyono, "Implementasi Pendekatan Realistic Mathematics Education Di Sekolah Dasar (Studi Literatur)."

²⁶ Pradita et al., "Konten E-Learning Dalam Pembelajaran Bahasa Bali Pada Era Revolusi Industri 4.0"; Mu'arivah et al., "Pengembangan Media Pembelajaran Interaktif Berbasis Scratch Pada Pemrograman Web Untuk Siswa SMK"; Pardede et al., "Pengembangan E-Book Interaktif Fisika Kelas XII Berbasis Web Dan Android Dengan Pendekatan Multirepresentasi."

²⁷ Syarifuddin Syarifuddin et al., "Analisis Tingkat Keterampilan Guru Sekolah Dasar Di Kota Bima Dalam Pengembangan Pembelajaran Berbasis Media Interaktif," *Jurnal Pendidikan Dan Pembelajaran Indonesia (Jppi)* 4, no. 1 (2024): 35–48, <https://doi.org/10.53299/jppi.v4i1.387>; Silvester Silvester et al., "Analisis Kompetensi Guru Sekolah Dasar Dalam Implementasi Pembelajaran Berbasis Digital," *Jurnal Dimensi Pendidikan Dan Pembelajaran* 11, no. 1 (2023): 166–74, <https://doi.org/10.24269/dpp.v11i1.8281>; Ummah and Nadlir, "Konsep Kurikulum Merdeka Dan Integrasi Media Pembelajaran Berbasis Digital Pada Jenjang Sekolah Dasar."

²⁸ Putra et al., "The Urgency of Digital Technology in Education: A Systematic Literature Review"; Hasnawiyah and Maslena, "Dampak Penggunaan Media Pembelajaran Interaktif Terhadap Prestasi Belajar Sains Siswa."

characteristics of the material and the learning conditions.²⁹ Therefore, a blended learning approach that combines conventional and interactive methods is a more realistic and adaptive alternative. This approach allows for flexibility in learning and gives teachers the freedom to tailor their strategies to students' needs.

From a scientific perspective, this study provides new insights into the dynamics of teaching method transformation at the elementary school level, particularly during implementation in the field. Unlike previous studies, which tended to focus on testing the effectiveness of instructional media, this study examines the transformation process holistically, including teacher-student interactions, facilitating and hindering factors, and the school's sociocultural context. Thus, this study contributes to the development of a more contextual and practical theory of interactive learning. Furthermore, this study enriches the literature on the implementation of the Merdeka Curriculum in elementary school teaching practices.³⁰

The practical implications of this study suggest that learning transformation requires comprehensive and integrated strategies. Teachers need to be encouraged to develop competencies in interactive learning design through practice-based training, such as the use of the ADDIE, MDLC, or 4D models in developing learning media.³¹ In addition, schools need to provide facilities and policies that support learning innovation. Collaboration among teachers, school principals, and other stakeholders is also key to creating a conducive learning environment. Thus, learning transformation can be sustained and has a significant impact on the quality of education.

Although this study makes a significant contribution, several limitations should be noted. First, this study was conducted at a single school, so the findings should be generalized with caution. Second, this study used a qualitative approach, so the results are contextual in nature and cannot be generalized statistically. Third, the study's limited duration also affected the depth of data exploration, particularly in observing long-term changes in learning practices. Therefore, future research is recommended to use a mixed-methods or longitudinal approach to obtain a more comprehensive picture of the impact of learning transformation. Additionally, further research could explore the use of specific technologies, such as AR/VR or game-based learning, in elementary schools.

Overall, this study's findings confirm that the shift from conventional to interactive teaching methods has great potential to enhance participation and understanding among elementary school students. However, the success of this shift depends heavily on teacher readiness, infrastructure support, and adaptive and contextual instructional design. Thus, the transformation of teaching and learning must be viewed as a complex, multidimensional process that requires synergy among the various components of the education system.

²⁹ Sunendar and Kamaluddin, "Implementasi Perangkat Lunak Sebagai Media Edukasi Bantuan Hidup Dasar: A Literature Review"; Naryanto et al., "Media Pembelajaran Kendaraan Bermotor Berbasis Permainan Virtual Reality Di SD Negeri Barusari 02 Semarang Selatan."

³⁰ Ummah and Nadlir, "Konsep Kurikulum Merdeka Dan Integrasi Media Pembelajaran Berbasis Digital Pada Jenjang Sekolah Dasar."

³¹ Mu'arivah et al., "Pengembangan Media Pembelajaran Interaktif Berbasis Scratch Pada Pemrograman Web Untuk Siswa SMK"; Inrafa et al., "Pengembangan Media Puzzle Interaktif Untuk Pengenalan Huruf Pada Anak Usia 5-6 Tahun Di Taman Kanak-Kanak"; Pardede et al., "Pengembangan E-Book Interaktif Fisika Kelas XII Berbasis Web Dan Android Dengan Pendekatan Multirepresentasi."

D. CLOSING

Conclusion

This study confirms that the shift from conventional to interactive teaching methods in elementary schools has significant theoretical and practical implications for improving learning quality. Based on the analysis presented, it can be concluded that there is a consistent relationship between the use of teaching methods and students' levels of participation and understanding. Interactive teaching methods have been shown to increase student engagement, whether through discussions, asking questions, or the ability to restate the material.

The findings of this study not only reinforce the constructivist conceptual framework, which emphasizes learning as an active process, but also provide empirical evidence on the dynamics of learning transformation in real-world elementary school contexts. Furthermore, this study successfully addresses a research gap by examining the learning transformation process holistically—including teacher-student interactions, facilitating and hindering factors, and the school's sociocultural context.

The main contribution of this study lies in its novel perspective on learning transformation—viewing it not merely as a change in methods, but as an adaptive process influenced by teacher readiness, facility availability, and instructional design. The practical implications of this study suggest that interactive learning needs to be systematically developed as a strategy to improve the quality of students' learning experiences, while continuing to consider the blended learning approach as a context-specific solution.

However, this study has limitations, including its restriction to a single research site, a relatively small number of informants, and a contextual qualitative approach. Therefore, the findings of this study cannot be generalized broadly without accounting for the characteristics of different contexts.

Recommendation

Based on the findings and limitations of this study, it is recommended that future research expand its scope by incorporating additional variables that may influence the results. Furthermore, a more diverse methodological approach, such as mixed methods, should be considered to obtain more comprehensive results.

Further research is also recommended to test this research model in different contexts to enhance its external validity. Furthermore, exploring other dimensions not yet revealed in this study is essential to developing a deeper, more holistic understanding.

Thus, it is hoped that research in this field will continue to evolve and make more significant contributions to the advancement of scientific knowledge and professional practice.

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