

Implementing Constructivist, Humanistic, and Connectivist Theories in Elementary Education to Explore Students' Potential

Agnia Salwa Humanisa, Aynizzahwa Ramadhani, Dinda Kirana Ramadhani*
Madrasah Ibtidaiyah Teacher Education Study Program, Faculty of Tarbiyah and Teacher Training,
Universitas Islam Negeri Syarif Hidayatullah Jakarta, Indonesia
dinda.kirana25@mhs.uinjkt.ac.id*
*Corresponding author

Article Info

Article history:

Submission Jul 23, 2026
First Revised Aug 18, 2026
Accepted Sep 21, 2026
Published Oct 20, 2026

Keywords:

Constructivist Theory
Humanistic Theory
Connectivist Theory
Elementary Education
Student Potential Development

ABSTRACT

Every elementary school student has intellectual, emotional, social, and creative potential that needs to be explored and developed through appropriate learning. This study aimed to analyze how constructivist, humanistic, and connectivist theories can be implemented in elementary education to explore students' potential and to identify the challenges and solutions of their implementation. A library research design was employed by reviewing scientific articles and proceedings published between 2020 and 2026, retrieved mainly through Google Scholar, and analyzed using qualitative content analysis. The results showed that constructivist theory explores students' potential through active knowledge construction in project-based learning, group discussions, simple experiments, and problem-solving; humanistic theory nurtures it through a safe and enjoyable learning climate, appreciation of individual differences, and self-actualization; and connectivist theory expands it through digital technology and information networks that build 21st-century skills. Integrating the three theories is expected to develop students' critical thinking, creativity, independence, collaboration, and character. However, implementation is still constrained by teachers' limited understanding, inadequate facilities, and the influence of digital culture, so strengthening teacher competence, improving infrastructure, integrating character education, building school-parent collaboration, and conducting continuous evaluation are required.

© 2026 Authors.

This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY-SA\)](#)



How to cite:

Humanisa, A. S., Ramadhani, A., & Ramadhani, D. K. (2026). Implementing Constructivist, Humanistic, and Connectivist Theories in Elementary Education to Explore Students' Potential. *Pedagonal: Jurnal Ilmiah Pendidikan*, 10(2), 95–106. <https://doi.org/10.55215/pedagonal.v10i2.80>

Introduction

Education is a conscious process of developing human potential and transmitting culture so that students grow into knowledgeable individuals with good character who are able to face changing times (Amaliyah & Rahmat, 2021). At the elementary school level, education plays a decisive role because it forms the foundation for the development of children's knowledge, attitudes, and skills. Each student has a unique profile of abilities, including linguistic, logical-mathematical, spatial, kinesthetic, musical, interpersonal, intrapersonal, naturalist, and existential intelligences, which teachers need to recognize and nurture (Asnawi et al., 2023; Fadila, 2025). Therefore, learning approaches are needed that help students develop these abilities to their full potential.

Curriculum development in the modern era demands learning that focuses not only on mastering subject matter but also on developing critical thinking, creativity, communication, and collaboration. In Indonesia, the Merdeka Curriculum encourages student-centered learning, including project-based learning, although its implementation in elementary schools still faces problems related to teacher readiness and facilities (Nugroho et al., 2025; Suratno & Angelline, 2024). In this context, learning theories serve as the conceptual foundation for designing effective instruction, and recent studies recommend that they be integrated rather than applied separately (Hartono & Wahyunuringtyas, 2026).

Constructivist theory holds that students construct their own knowledge through experience and interaction with their environment, so that teachers act as facilitators of meaningful learning (Hasibuan & Sutarto, 2025; Subarjo et al., 2023). Humanistic theory emphasizes that learning must consider students' needs, interests, emotions, and the development of the whole person (Kusumah et al., 2025). Connectivist theory, meanwhile, views learning as the process of forming connections within distributed knowledge networks supported by digital technology (Fatullah et al., 2026; Mukhlis et al., 2024). Empirical studies in elementary schools also show that well-designed learning media, such as science literacy-based electronic worksheets (E-LKPD), TPACK-based digital textbooks, and comic media, can improve students' conceptual understanding, engagement, and language skills (Sumirat et al., 2024; Sundari, Gani, et al., 2025; Sundari, Yufiarti, & Bintoro, 2025).

Despite these developments, many classroom practices remain teacher-centered and do not yet provide enough room for students to develop their potential (Kusumah et al., 2025). Teachers' understanding of students' characteristics and development also still needs to be strengthened (Saadillah et al., 2026), while character education in elementary schools continues to face pedagogical and environmental obstacles (Mujtahid et al., 2026). Previous studies have generally discussed each learning theory separately or examined learning theories in general terms, so that studies that integrate constructivist, humanistic, and connectivist theories specifically to explore the potential of elementary school students, together with the challenges and solutions of their implementation, are still limited.

Therefore, this study aims to describe the potential and characteristics of elementary school students, to analyze the implementation of constructivist, humanistic, and connectivist theories in the elementary school curriculum, to formulate an integrated strategy for applying the three theories to explore students' potential, and to identify the challenges and solutions related to their implementation. The findings are expected to enrich the theoretical discussion of learning in elementary education and to provide

practical guidance for teachers in designing active, creative, enjoyable, and meaningful learning.

Method

This study employed a qualitative approach with a library research design. Library research was chosen because the study aimed to synthesize concepts and empirical findings on the implementation of constructivist, humanistic, and connectivist theories in elementary education, an approach also used in recent reviews of learning theories (Hartono & Wahyunuringtyas, 2026; Susanto et al., 2024). The data consisted of secondary sources in the form of scientific journal articles and conference proceedings.

The sources were searched mainly through Google Scholar and complemented by the Garuda portal and journal websites, using Indonesian and English keywords such as “teori konstruktivisme sekolah dasar”, “humanistic learning theory”, “connectivism”, “potensi peserta didik”, “multiple intelligences”, “karakteristik peserta didik”, and “tantangan implementasi kurikulum”. Sources were included if they were published between 2020 and 2026, were relevant to learning theories, student potential, or curriculum implementation in elementary education, were published in peer-reviewed journals or proceedings, and were available in full text or with a complete abstract. A total of 22 sources met these criteria and were analyzed.

The data were analyzed using qualitative content analysis through the stages of data reduction, categorization, synthesis, and conclusion drawing. The findings were grouped into six themes: students’ potential, students’ characteristics, the implementation of constructivist theory, the implementation of humanistic theory, the implementation of connectivist theory, and the challenges and solutions of implementation. Source triangulation was carried out by comparing the findings of different studies on the same theme to ensure the credibility of the synthesis.

Results and Discussion

Understanding the Potential of Elementary School Students

Education involves the development of human potential and the transmission of culture, and it is carried out by all parties involved in the educational process, including teachers, students, school administrators, and the surrounding environment (Amaliyah & Rahmat, 2021). The essence of learning is to help students optimize the development of their intellectual potential. Therefore, teachers need to understand each student’s abilities in order to improve the quality of learning and help students develop their intelligence (Asnawi et al., 2023). Potential can be understood as an ability that has not yet been realized; through learning and the influence of the environment, it can be turned into real competencies that are useful in various aspects of life.

Howard Gardner’s theory of multiple intelligences provides a useful framework for recognizing this potential. Linguistic intelligence is the ability to use words effectively in speaking and writing; logical-mathematical intelligence relates to the use of numbers and logic; spatial intelligence is the ability to perceive the visual world accurately and to imagine creatively; and bodily-kinesthetic intelligence is the ability to use the body to express ideas and feelings. Musical intelligence involves sensitivity to rhythm, melody, and tone; interpersonal intelligence is the ability to understand others and communicate well; intrapersonal intelligence is the ability to understand oneself and reflect; naturalist intelligence is the ability to recognize and classify plants and animals; and existential

intelligence relates to understanding the meaning of life and one's position in the world (Asnawi et al., 2023). Prospective elementary teachers who understand multiple intelligences are able to apply varied, multimodal, and adaptive learning activities that increase students' engagement, motivation, and learning outcomes (Fadila, 2025).

As an essential part of the school or madrasah curriculum, self-development activities are carried out to develop students' abilities, attitudes, and personalities, including through counseling services and extracurricular activities that help identify their interests and talents. Every child is born with potential that will grow when the opportunity and encouragement to develop it are available. Accordingly, the goal of education is to develop all aspects of students' potential in line with their nature and uniqueness so that they can achieve satisfactory results in accordance with the desired educational goals (Amaliyah & Rahmat, 2021).

Characteristics of Elementary School Students

Every child has different characteristics. Therefore, teachers must understand students' initial characteristics in order to select learning strategies and tailor materials to students' circumstances, so that learning becomes more meaningful. Students' characteristics include their general abilities, prior experiences, expectations of learning, and physical, cognitive, emotional, and social development, all of which influence how effectively they learn. A recent professional development program showed that strengthening teachers' understanding of these aspects made them more systematic in identifying students' learning characteristics and more adaptive in implementing student-centered learning (Saadillah et al., 2026).

From the perspective of Piaget's theory, elementary school children are generally in the concrete operational stage, in which they think logically about concrete objects and real experiences. Learning that is contextual, cooperative, and inquiry-based therefore suits their cognitive development (Susanto et al., 2024). Children of this age also enjoy activities that stimulate their imagination and learn more effectively in a comfortable environment that is connected to their daily lives. Therefore, identifying students' initial abilities and characteristics is an important first step for teachers before designing learning activities.

The identification process can begin with recognizing students' temperament, because the way students learn and complete assignments is strongly influenced by it. Some students adapt quickly and show interest in new situations, others initially appear hesitant but gradually become comfortable, while still others need a longer time to adjust and are more prone to emotional reactions. This understanding is then complemented by observing students during the learning process, since students' character is revealed through the way they speak, interact, and express themselves, as well as through the way they play and work with their peers. Such interaction patterns usually reappear when students are asked to complete assignments in groups, so that group work becomes a valuable moment for teachers to observe students' tendencies (Saadillah et al., 2026).

In addition, teachers need to build two-way communication with students. Responsive communication allows teachers to understand students' opinions and feelings, while students feel free to ask questions and convey the topics they want to explore. Furthermore, students should also be involved in self-awareness programs, because 21st-century learners need to recognize their own abilities, talents, and interests, not only their personalities. When students understand themselves, they are able to take a more active role in their learning, and teachers can adjust their approaches to students' uniqueness more precisely (Fadila, 2025).

Various aspects of child development, namely physical, social, emotional, and cognitive, are closely related, and although development follows a certain sequence, its pace differs for each child (Azizah, 2026; Susanto et al., 2024). By considering these characteristics, teachers can design learning that is relevant to students' daily lives, allows them to gain hands-on experience individually and in groups, and makes the subject matter easier to understand.

Implementation of Constructivist Theory in the Elementary School Curriculum

Constructivism states that individuals actively construct their own knowledge and that their learning experiences shape how they understand the world. Piaget explained that cognitive development occurs through assimilation, accommodation, and equilibration, in which learners continually adjust new experiences to what they already know (Azizah, 2026). In the elementary curriculum, the implications of this view include formulating learning objectives based on students' developmental stages, selecting learning materials that are close to students' experiences, organizing methods such as group learning, experiments, role-playing, and problem solving, posing questions that encourage critical and creative thinking, and assessing both learning processes and outcomes (Hasibuan & Sutarto, 2025; Susanto et al., 2024).

In a constructivist classroom, students use their existing knowledge as a foundation and develop it as they acquire new information, while the teacher acts as a facilitator and moderator. A literature review showed that elementary students who learned through a constructivist approach demonstrated better problem-solving skills and critical thinking, especially when positive collaboration between teachers and students was built (Subarjo et al., 2023). Collaborative learning is not merely dividing tasks, but provides opportunities for students to develop, compare, and evaluate different perspectives on a problem. The differences between traditional and constructivist classrooms are summarized in Table 1.

Table 1. Comparison of Traditional and Constructivist Classrooms

Traditional Classroom	Constructivist Classroom
The curriculum begins with the parts of the whole and emphasizes basic skills.	The curriculum begins with the whole and expands to the parts, emphasizing core concepts.
Strict adherence to the prescribed curriculum is highly valued.	Learning materials are derived from primary sources and can change according to students' needs.
The main materials are textbooks and worksheets.	Learning is interactive and builds on what students already know.
Learning relies on repetition.	Learning develops students' existing knowledge through exploration.
Teachers transmit information, and students act as passive recipients.	Teachers engage in dialogue with students and help them construct their own understanding.
The teacher's role is directive and based on authority.	The teacher's role is interactive and based on mutual involvement.
Evaluation is carried out through tests with a single correct answer.	Assessment includes students' work, observations, perspectives, and tests; the process is as important as the result.
Knowledge is considered static.	Knowledge is considered dynamic and changes along with students' experiences.
Students mostly work individually.	Students mostly work in groups.

Source: Authors' synthesis of the reviewed literature (Hasibuan & Sutarto, 2025; Subarjo et al., 2023).

Table 1 shows that the constructivist classroom shifts the focus from transmitting information to facilitating students' construction of knowledge. Constructivism can be implemented by presenting real problems and questions that encourage students to think critically when they encounter new information. Project-based learning in the Merdeka Curriculum, for example, has been shown to engage students behaviorally, emotionally, and cognitively (Nugroho et al., 2025). Similarly, a science literacy-based E-LKPD developed with the ADDIE model was rated highly feasible by experts and significantly improved fourth-grade students' conceptual understanding of force and motion, because it guided students to explore phenomena and construct concepts actively (Sundari, Gani, et al., 2025). These findings confirm that constructivist learning emphasizes the learning process as much as the final result.

Implementation of Humanistic Theory in the Elementary School Curriculum

Humanistic psychology views humans as whole beings with unique characteristics who have the ability to control their own actions and the right to explore and develop their potential. From this perspective, learning aims to make humans more human, and the learning process is considered successful when students can understand themselves and actualize their potential. Maslow emphasized students' creativity and experience, while Rogers described the teacher as a facilitator who builds relationships based on empathy, trust, and attention to students' needs (Feigenbaum, 2024). In the Islamic view, learning is an obligation for everyone to develop their abilities according to their talents, as Allah SWT states in Surah An-Nahl:

وَاللَّهُ أَخْرَجَكُمْ مِنْ بُطُونِ أُمَّهَاتِكُمْ لَا تَعْلَمُونَ شَيْئًا وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ
لَعَلَّكُمْ تَشْكُرُونَ

“And Allah brought you out of your mothers' wombs knowing nothing, and He gave you hearing, sight, and hearts so that you might be grateful” (Q.S. An-Nahl [16]: 78). Based on humanistic learning theory, teachers encourage students to explore their potential in terms of intelligence and talent. This theory emphasizes the development of the individual as a whole, encompassing thinking, feeling, and morality, rather than focusing solely on academic achievement. Humanistic classroom management places students at the center of learning and creates a safe, supportive, and meaningful environment that treats each student as an individual with emotional, social, and cognitive needs (Kusumah et al., 2025).

In practice, humanistic learning helps students achieve higher self-awareness by increasing their self-confidence, empathy, and responsibility for their own learning. A study on fourth-grade science learning showed that applying humanistic theory with a deep learning approach improved students' engagement, conceptual understanding, and emotional expression, with the proportion of students achieving the learning targets increasing from 68% to 91.7% (Astria & Puspita, 2025). Learning media that are enjoyable and close to children's world also support this goal; comic media, for instance, made fourth-grade students motivated and enthusiastic and improved their skills in writing rhymed songs (Sumirat et al., 2024). Furthermore, assessment should not only focus on final results but also consider students' learning styles, attitudes, and character development. In this way, humanistic education contributes to shaping students who are independent, have integrity, and are able to compete globally without neglecting human values (Hartono & Wahyunuringtyas, 2026).

Implementation of Connectivist Theory in the Elementary School Curriculum

Connectivism, introduced by George Siemens and Stephen Downes, states that knowledge resides in networks and that learning is the process of connecting important information sources through technology. From this perspective, digital technology is not only a learning tool but also part of the human way of thinking. Learning occurs when students are able to access, select, and use information from various sources, such as digital learning resources, discussion forums, and online communities (Mukhlis et al., 2024). Connectivism builds on cognitivist principles, which emphasize that learning is an internal mental process involving attention, memory, and information processing; the application of cognitivist strategies such as problem solving, group discussion, and visual media has been shown to increase elementary students’ engagement, understanding, and motivation (Prameswari et al., 2025).

Connectivism plays an important role in lifelong learning because it encourages independent learning and adaptability. In principle, connectivism views learning as a process of connecting knowledge nodes or information sources within a network, so that the ability to find and recognize relevant information becomes more important than the amount of knowledge an individual holds. Knowledge is no longer stored only in the individual’s mind but can also reside outside the individual, for example in digital devices and learning communities. Consequently, learning involves recognizing patterns and relationships among pieces of information, and the ability to maintain and update knowledge becomes a crucial aspect of learning. Because information develops continuously, learning decisions also change constantly in line with the dynamics of information (Fatullah et al., 2026; Mukhlis et al., 2024).

In elementary education, connectivism is implemented through technology-enhanced learning such as interactive digital media, learning management systems, and blended and project-based learning that use digital networks as learning resources. A systematic review of 67 articles found that TPACK-based digital textbooks for primary science, which integrate technological, pedagogical, and content knowledge, increased students’ conceptual knowledge and learning engagement, although teachers still need hands-on training to design them (Sundari, Yufiarti, & Bintoro, 2025). Nevertheless, connectivism needs to be reconceptualized as an integrative pedagogical framework that balances technological connectivity with cognitive, social, and ethical dimensions (Fatullah et al., 2026), especially since the digital divide and excessive dependence on self-directed learning can limit its effectiveness for young learners (Mukhlis et al., 2024).

Integrating the Three Theories to Explore the Potential of Elementary School Students

The three theories complement one another: constructivism provides the learning process, humanism provides the learning climate and the orientation toward the whole person, and connectivism provides the resources and networks needed in the digital era. The integration of these theories as a single conceptual model enables teachers to act as responsive facilitators who build a holistic learning ecosystem in line with the Merdeka Curriculum (Hartono & Wahyunuringtyas, 2026). The implementation strategies of each theory are summarized in Table 2.

Table 2. Implementation Strategies of the Three Theories for Exploring Students’ Potential

Theory	Learning Strategies	Teacher’s Role	Potential Developed
--------	---------------------	----------------	---------------------

Theory	Learning Strategies	Teacher's Role	Potential Developed
Constructivist	Project-based learning, group discussions, simple experiments, problem solving, and learning in real contexts	Facilitator who provides opportunities to explore ideas and experiences	Critical thinking, creativity, self-confidence, and social skills
Humanistic	Comfortable and enjoyable learning climate, appreciation of diverse abilities, emotional support, and freedom to express interests and talents	Facilitator who understands students' needs and feelings and builds positive communication	Motivation, self-awareness, empathy, and self-actualization
Connectivist	Interactive digital media, concept mapping, online collaboration, question-and-answer activities, and evaluation of information	Guide who helps students connect new material with prior knowledge and use technology responsibly	Digital literacy, independent learning, problem solving, and memory

Source: Authors' synthesis of the reviewed literature (Hartono & Wahyunuringtyas, 2026; Kusumah et al., 2025; Mukhlis et al., 2024).

As shown in Table 2, constructivist strategies develop critical thinking, creativity, and self-confidence because students learn through hands-on activities, observation of their surroundings, and collaboration with peers (Subarjo et al., 2023). Humanistic strategies address students' psychological needs so that their motivation and interest in learning increase; teachers appreciate students' efforts, build positive communication, and involve students in activities that match their interests, such as art, sports, reading, and other creative activities (Kusumah et al., 2025). Connectivist strategies, supported by cognitively sound media design, help students understand concepts step by step, connect new material to their prior experiences, and use technology responsibly (Prameswari et al., 2025; Sundari, Yufiarti, & Bintoro, 2025). The relationship between students' potential, the three theories, the supporting conditions, and the expected outcomes is illustrated in Figure 1.

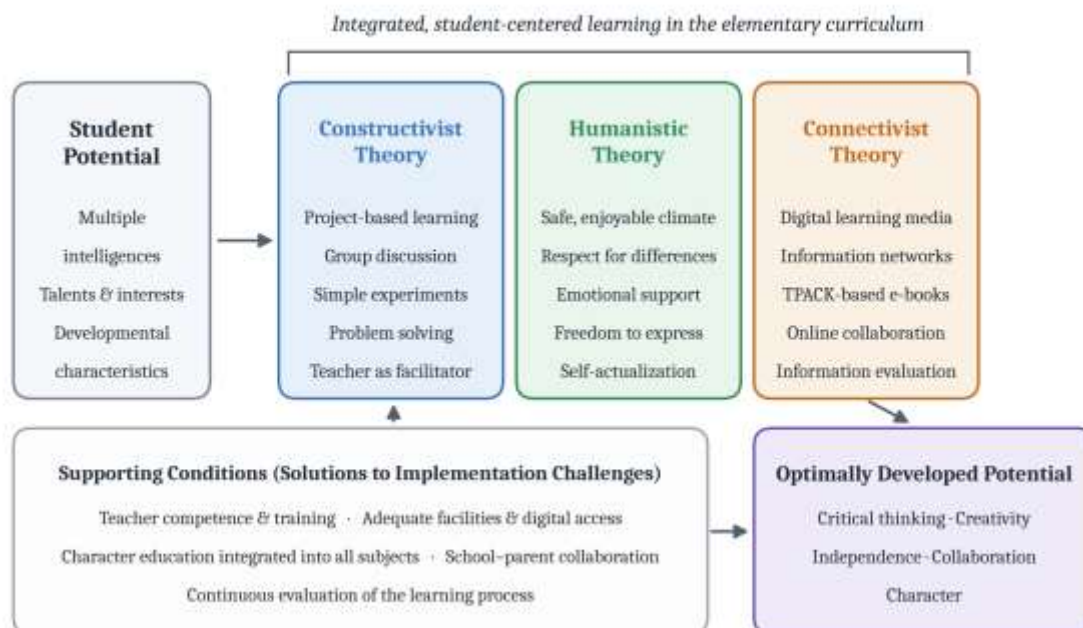


Figure 1. Conceptual Framework for Integrating Constructivist, Humanistic, and Connectivist Theories to Develop Elementary Students' Potential

Figure 1 shows that students' potential, consisting of multiple intelligences, talents and interests, and developmental characteristics, serves as the starting point of learning design. The three theories are then applied in an integrated manner so that students' potential develops into critical thinking, creativity, independence, collaboration, and character. This process requires supporting conditions, namely teacher competence, adequate facilities, integrated character education, school-parent collaboration, and continuous evaluation, which are discussed in the following section.

Challenges and Solutions of Implementation in the Elementary Curriculum

Character education implemented in schools is a crucial step in strengthening students' moral values and maximizing their talents. However, its implementation in elementary schools still faces significant obstacles (Mujtahid et al., 2026). The first and most fundamental challenge lies in teachers' attitudes and understanding. Many teachers still understand character education normatively, so that instruction is dominated by lectures and lacks strategies for internalizing values (Mujtahid et al., 2026), and teachers also often have a limited understanding of the structure and materials of the Merdeka Curriculum (Suratno & Angelline, 2024). This condition is reinforced by weak curriculum and policy support, in which character education is often treated as an add-on rather than as a core component of the teaching and learning process (Mujtahid et al., 2026).

Beyond the school, the influence of digital culture has become an increasingly serious challenge. External cultural influences now enter more easily through information technology, while the spread of misleading information and declining social interaction can weaken the values that society upholds (Susanti et al., 2025). At the same time, inequality of facilities between urban and rural schools remains difficult to overcome. Schools in remote areas often lack adequate access to computers, the internet, and multimedia devices, and the lack of teaching materials that support the Merdeka Curriculum forces teachers to innovate with limited time and resources. These problems are further

compounded by limited training, as tight training schedules and the lack of post-training mentoring make it difficult for teachers to apply new ideas in the classroom (Suratno & Angelline, 2024).

To overcome these challenges, a strategic approach is needed through education and training for teachers, school principals, and supervisors so that the curriculum can be implemented more effectively and adapted to students' needs (Suratno & Angelline, 2024). This effort begins with improving teachers' understanding through regular training and workshops on character education, student-centered learning, and TPACK-based learning design, so that teachers are able to integrate these approaches into their teaching and serve as role models for students (Sundari, Yufiarti, & Bintoro, 2025). Character education also needs to be integrated into the curriculum by embedding character values in every subject and reinforcing them through school programs such as weekly projects, so that these values become a natural part of daily learning (Mujtahid et al., 2026).

In addition, schools need to strengthen cooperation with parents by involving them in supervising and guiding children's digital activities, so that the values taught at school continue to be practiced at home (Susanti et al., 2025). These efforts must be supported by the equitable distribution of infrastructure, the optimal use of digital platforms, and continuous evaluation of the learning process, so that the constructivist, humanistic, and connectivist theories can be implemented consistently in elementary schools (Suratno & Angelline, 2024).

Conclusion

This study concludes that the potential of elementary school students, which includes multiple intelligences, talents, interests, and developmental characteristics, can be developed optimally through the integrated implementation of constructivist, humanistic, and connectivist theories in the elementary curriculum. Constructivist theory enables students to build knowledge through active and collaborative experiences, humanistic theory ensures a safe and enjoyable learning climate that supports self-actualization, and connectivist theory equips students to use technology and information networks in line with the demands of 21st-century education, so that together they foster students' critical thinking, creativity, collaboration, independence, and character. However, their implementation is still hindered by teachers' limited understanding, unequal facilities, and the influence of digital culture; therefore, strengthening teacher competence, improving infrastructure, integrating character education, building collaboration among schools, teachers, parents, and the government, and conducting continuous evaluation are required. Future studies are recommended to test this integrated framework empirically in elementary school classrooms.

Acknowledgment

The authors would like to express their sincere gratitude to the lecturers of the Madrasah Ibtidaiyah Teacher Education Study Program, Faculty of Tarbiyah and Teacher Training, Universitas Islam Negeri Syarif Hidayatullah Jakarta, for their guidance and constructive feedback during the preparation of this article. The authors also thank the editors and reviewers of *Pedagonal: Jurnal Ilmiah Pendidikan*, as well as all colleagues whose insights helped improve the quality of this manuscript.

Author Contributions

Conceptualization: ASH, AR, DKR; Methodology: DKR, ASH; Literature search and analysis: ASH, AR, DKR; Writing – original draft: ASH, AR, DKR; Writing – review & editing: DKR; Supervision: DKR.

Funding

This research received no external funding.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Use of Artificial Intelligence

The authors used Microsoft Copilot to assist with language refinement, manuscript organization in accordance with the journal template, and reference formatting. All AI-generated suggestions were carefully reviewed and verified by the authors, who take full responsibility for the accuracy, originality, and final content of the manuscript.

References

- Amaliyah, A., & Rahmat, A. (2021). Pengembangan potensi diri peserta didik melalui proses pendidikan. *Attadib: Journal of Elementary Education*, 5(1), 28–45. <https://doi.org/10.32832/at-tadib.v5i1.19598>
- Asnawi, A., Rakhmat, C., & Sidik, G. S. (2023). Peran guru dalam menemukan dan mengembangkan potensi kecerdasan peserta didik di sekolah dasar. *Jurnal Educatio*, 9(2), 1089–1099. <https://doi.org/10.31949/educatio.v9i2.5017>
- Astria, M., & Puspita, R. D. (2025). Application of humanistic theory assisted by deep learning in science learning grade 4 SDN 108/1 Sungai Rumbai. *Jurnal Profesi Pendidikan*, 4(1). <https://doi.org/10.22460/jpp.v4i1.27433>
- Azizah, E. (2026). Teori kognitif Jean Piaget: Tahapan kognitif dan relevansinya dalam praktik pembelajaran. *Maliki Interdisciplinary Journal*, 4(9), 252–257. <https://urj.uin-malang.ac.id/index.php/mij/article/view/23201>
- Fadila, A. N. (2025). Pentingnya pemahaman calon guru sekolah dasar tentang multiple intelligences guna mengoptimalkan hasil belajar siswa. *Didaktika*, 5(4), 507–517. <https://doi.org/10.17509/didaktika.v5i4.95107>
- Fatullah, R., Sudirman, A., & Hidayat, S. (2026). Reconstructing connectivism theory in 21st-century education. *Foremost Journal*, 7(1), 104–109. <https://doi.org/10.33592/foremost.v7i1.8012>
- Feigenbaum, K. D. (2024). A critique of Abraham Maslow and Carl Rogers as educators. *Journal of Humanistic Psychology*, 64(1), 44–63. <https://doi.org/10.1177/00221678231154819>
- Hartono, M. E.-B., & Wahyunuringtyas, R. N. (2026). Implikasi teori belajar (behaviorisme, kognitivisme, humanisme, dan konstruktivisme) sebagai landasan pengembangan pembelajaran yang efektif. *Jurnal Basicedu*, 10(1), 17–28. <https://doi.org/10.31004/basicedu.v10i1.10844>

- Hasibuan, N. S., & Sutarto, J. (2025). Implementasi teori belajar konstruktivisme untuk meningkatkan pemahaman konsep pada siswa sekolah dasar. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 11(4), 406–413. <https://doi.org/10.36989/didaktik.v11i04.10741>
- Kusumah, N. P., Azzahra, N. M., Mahira, N. Y., Zahra, N. T., Aritonang, N., & Iskandar, S. (2025). Konsep dan implementasi model pengelolaan kelas berbasis humanistik. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(4), 244–251. <https://doi.org/10.23969/jp.v10i04.37400>
- Mujtahid, I. M., Siregar, R., & Vebrianto, R. (2026). Analisis masalah pendidikan karakter di sekolah dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11(2), 258–276. <https://doi.org/10.23969/jp.v11i02.49543>
- Mukhlis, H., Haenilah, E. Y., Sunyono, Maulina, D., Nursafitri, L., Nurfaizal, & Noerhasmalina. (2024). Connectivism and digital age education: Insights, challenges, and future directions. *Kasetsart Journal of Social Sciences*, 45(3), 803–814. <https://doi.org/10.34044/j.kjss.2024.45.3.11>
- Nugroho, O. F., Hikmawaty, L., & Juwita, S. R. (2025). Analysis of student engagement in project based learning in the Merdeka Curriculum. *Pedagonal: Jurnal Ilmiah Pendidikan*, 9(1), 49–59. <https://doi.org/10.55215/pedagonal.v9i1.32>
- Prameswari, T. I., Jupisa, R., & Iryani, E. (2025). Penerapan teori kognitivisme dalam meningkatkan efektivitas proses pembelajaran di sekolah. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 4(2), 14160–14168. <https://doi.org/10.31004/jerkin.v4i2.4153>
- Saadillah, A., Jumriah, J., Nurlian, S., Agustina, A., Pramesti P. S, A. S., Wulandari, C. A., Fega, N., & Selda, S. (2026). Optimalisasi pemahaman guru tentang karakteristik dan perkembangan peserta didik di SD Negeri 2 Lalombaa. *Jurnal Pendidikan Tambusai*, 10(1), 6012–6021. <https://doi.org/10.31004/jptam.v10i1.37124>
- Subarjo, M. D. P., Suarni, N. K., & Margunayasa, I. G. (2023). Analisis penerapan pendekatan teori belajar konstruktivisme pada kemampuan berpikir kritis siswa sekolah dasar. *Ideguru: Jurnal Karya Ilmiah Guru*, 9(1), 313–318. <https://doi.org/10.51169/ideguru.v9i1.834>
- Sumirat, D. N., Sundari, F. S., & Nurjanah, S. (2024). Efektivitas penggunaan media komik pada keterampilan menulis lagu gubahan menggunakan rima pada pembelajaran Bahasa Indonesia peserta didik kelas IV B SD Negeri Bondongan Kota Bogor. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 10(2), 722–735. <https://doi.org/10.36989/didaktik.v10i2.3391>
- Sundari, F. S., Gani, R. A., Rahmah, M., Maulidia, N., & Rizky, K. S. (2025). Interactive science learning innovation management through the design of science literacy-based E-LKPD to improve conceptual understanding. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 9(3), 824–839. <https://doi.org/10.33650/al-tanzim.v9i3.11620>
- Sundari, F. S., Yufiarti, & Bintoro, T. (2025). TPACK-based e-textbooks for science literacy: A systematic review in primary school education. In *Proceeding International Conference on Education* (Vol. 3, pp. 469–493). <https://jurnalfaktarbiyah.iainkediri.ac.id/index.php/proceedings/article/view/6770>
- Suratno, S., & Angelline, A. (2024). Implementasi Kurikulum Merdeka di sekolah dasar: Tantangan, kesiapan guru, dan strategi pelaksanaan dalam kajian literatur. *Elementary School Teacher*, 7(2), 113–119. <https://doi.org/10.15294/est.v7i2.64423>

- Susanti, I., Male, C. N., Setiawan, O. I., Fitri, T. A., & Amiruddin. (2025). Pendidikan karakter di tengah perkembangan teknologi: Tantangan dan strategi membangun karakter di era digital. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(4), 419–433. <https://doi.org/10.23969/jp.v10i04.37377>
- Susanto, A. H., Wulandari, M. D., & Darsinah. (2024). Optimalisasi pembelajaran anak usia sekolah dasar melalui pemahaman teori perkembangan kognitif Jean Piaget. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 9(4), 689–706. <https://doi.org/10.23969/jp.v9i4.17102>