



Cognitive, social, emotional, and moral development of fourth-grade elementary school students

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ABSTRACT

Background: Elementary school is a crucial stage for cognitive, social, emotional, and moral development, which form the foundation for lifelong learning and character formation. Understanding students' developmental characteristics is essential for designing learning environments that support holistic growth. This study aims to identify the developmental characteristics of fourth-grade students at SDN 1 Suwawa Selatan and analyze how the school environment supports their overall development. **Methods:** This study employed a qualitative descriptive approach. Data were collected through classroom observations, interviews with the fourth-grade homeroom teacher, and documentation of students' academic and non-academic activities during the 2025 academic year. Data were analyzed descriptively to identify patterns in students' developmental characteristics and supporting educational practices. **Findings:** The findings show that fourth-grade students demonstrate progress in logical thinking, problem-solving, and language skills, consistent with the concrete operational stage. Social development is reflected in improved collaboration, communication, and participation in group activities, although some students require support in emotional regulation and conflict resolution. Emotional development includes increased self-confidence and responsibility, while moral development is evident through compliance with school rules, respect for teachers, and participation in character education programs. Teacher- and student-centered strategies, a positive classroom climate, interactive and cooperative learning, contextual teaching, and parental involvement contribute to students' holistic development. **Conclusion:** Fourth-grade students exhibit balanced development across cognitive, social, emotional, and moral domains. Continued collaboration among teachers, parents, and school administrators is essential to provide a supportive environment for academic and socio-emotional development. **Novelty/Originality of this article:** This study integrates the four developmental domains within a single educational setting and highlights the combined contribution of instructional strategies, classroom climate, and parental involvement to students' holistic development.

KEYWORDS: elementary school, development, students.

1. Introduction

Student development at the elementary school level represents a dynamic and multidimensional process involving cognitive, social, emotional, physical, and moral growth. Fourth-grade students, typically aged between 9 and 10 years old, are in a crucial transitional phase of development. At this stage, children demonstrate significant progress

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in logical thinking, peer interaction, emotional regulation, and moral reasoning. Understanding their developmental characteristics is essential for designing effective instructional strategies and fostering a supportive learning environment. Recent studies emphasize that holistic student development in primary education strongly influences academic achievement and long-term personal growth (OECD, 2023; Berk, 2018; Hurlock, 2011; Papalia & Martorell, 2021; Santrock, 2018).

Cognitively, fourth-grade students are generally positioned within the concrete operational stage of development. At this level, they begin to think logically about concrete events, classify objects systematically, and understand cause-and-effect relationships. However, they may still struggle with abstract reasoning. Research conducted over the past five years highlights that strengthening analytical thinking and problem-solving skills at the upper elementary level significantly enhances students' academic performance and critical literacy skills (UNESCO, 2022). Therefore, structured classroom activities that promote inquiry-based learning, collaboration, and contextual understanding are necessary to support their cognitive advancement (Oktaviani et al., 2023; Fatmawati et al., 2025).

In addition to cognitive growth, social development plays a central role in shaping students' school experiences. Fourth-grade students begin to value peer acceptance, teamwork, and cooperative learning more strongly than in earlier grades. They are increasingly aware of social norms and expectations within the classroom setting. A 2024 study on elementary education found that collaborative learning environments improve students' communication skills, empathy, and conflict resolution abilities (Widyananti & Winanto, 2024). These findings underline the importance of creating classroom cultures that encourage interaction, mutual respect, and shared responsibility (Handayani & Kurniawan, 2021; Slavin, 2018; Supratman et al., 2025).

Emotional development is equally critical during this stage. Children in Grade 4 are gradually developing stronger emotional awareness and self-regulation skills. However, they may still experience fluctuations in mood and self-confidence, particularly when facing academic challenges or peer pressure. According to a 2023 report on Social and Emotional Learning (SEL), structured emotional literacy programs in elementary schools significantly improve students' resilience, motivation, and academic engagement (CASEL, 2023). Emotional competence has also been linked to improved classroom behavior and stronger teacher-student relationships (Baharudin et al., 2025; Setiana & Eliasa, 2024).

The post-pandemic educational landscape has introduced additional challenges to student development. Studies conducted between 2021 and 2024 indicate that disruptions in face-to-face learning affected children's academic progress and social-emotional skills worldwide (UNICEF, 2023). Reduced peer interaction during remote learning periods limited opportunities for collaborative learning and emotional expression. As schools transition fully back to in-person instruction, there is a pressing need to assess students' developmental conditions and implement recovery-oriented educational strategies.

Moral and character development also becomes increasingly visible in the fourth grade. At this level, students begin to understand fairness, responsibility, honesty, and respect more deeply. Character education integrated into daily classroom routines has been shown to positively influence students' behavioral outcomes and ethical awareness (Berkowitz & Bier, 2021). Teachers play a significant role as role models in reinforcing positive values through consistent guidance and reinforcement. Within the Indonesian educational context, elementary schools are expected to implement holistic education aligned with the national curriculum framework. The Merdeka Curriculum, introduced and strengthened in recent years, emphasizes competency-based learning, character building, and differentiated instruction. According to the Ministry of Education (2023), effective implementation of this curriculum requires teachers to understand students' developmental stages comprehensively in order to adapt teaching methods accordingly. This aligns with contemporary research advocating for child-centered pedagogical approaches that integrate cognitive and socio-emotional competencies. Character education integrated into daily classroom routines has been shown to positively influence students' behavioral outcomes and ethical awareness (Berkowitz & Bier, 2021; Arrahmi et al., 2025).

At SDN 1 Suwawa Selatan/Suwawa Selatan 1 State Elementary School, understanding the developmental profile of fourth-grade students is particularly important to ensure that instructional strategies meet students' evolving needs. Observations in many elementary settings show variations in students' academic readiness, emotional maturity, and social skills. Some students demonstrate strong collaborative abilities and academic independence, while others require additional support in emotional regulation or peer interaction. Identifying these variations can help educators provide targeted interventions and differentiated learning opportunities.

Furthermore, parental involvement has been identified as a significant factor influencing student development. Recent research confirms that strong communication between parents and teachers enhances children's academic motivation and emotional well-being (Epstein, 2022). Therefore, collaboration between school and home environments is essential in fostering balanced development among fourth-grade students. Given these considerations, it is necessary to conduct a comprehensive analysis of the development of fourth-grade students at SDN 1 Suwawa Selatan. This study aims to explore students' cognitive, social, emotional, and moral growth within the school context and to examine how instructional practices and environmental factors contribute to their development. By identifying both strengths and challenges in student development, the research seeks to provide practical recommendations for improving classroom practices and supporting holistic growth.

In conclusion, the development of fourth-grade students represents a critical foundation for future academic success and personal maturity. Recent educational research consistently highlights the interconnectedness of cognitive skills, social competence, emotional regulation, and moral understanding. Therefore, a comprehensive examination of student development at SDN 1 Suwawa Selatan is essential to ensure that educational practices are responsive, inclusive, and aligned with contemporary educational standards. Through collaborative efforts among teachers, parents, and school administrators, it is possible to create a learning environment that nurtures well-rounded, confident, and capable learners.

Education plays a fundamental role in shaping the intellectual, emotional, social, and moral development of students, especially at the elementary school level. Elementary education is considered the foundation for the formation of knowledge, attitudes, and skills that will influence students in the next stage of education. At this level, students experience rapid development in cognitive, affective, and psychomotor aspects. Therefore, teachers must understand the characteristics of student development in order to create effective learning processes. The development of fourth-grade students is particularly important because they are at a transitional stage from lower grades to higher grades, where learning demands become more complex and require higher thinking skills (Wiyani, 2014; Yusuf, 2012).

Student development is not only influenced by academic learning but also by environmental, social, and psychological factors. According to developmental psychology theory, children aged 9–10 years, which corresponds to grade 4 elementary school students, are in the concrete operational stage. At this stage, students begin to be able to think logically about concrete objects but still have difficulty understanding abstract concepts. Therefore, learning activities must use real examples, visual media, and interactive methods so that students can understand the material more easily (Kurniawati & Sari, 2023; Hidayat & Nur, 2021). If the learning process does not match the developmental stage, students may experience difficulties in understanding lessons, decreased motivation, and low learning outcomes. At this stage, students begin to be able to think logically about concrete objects but still have difficulty understanding abstract concepts (Berk, 2018; Fatmawati et al., 2025; Papalia & Martorell, 2021; Santrock, 2018).

In the context of elementary education in Indonesia, improving the quality of learning is an important issue, especially in rural and suburban schools. SDN 1 Suwawa Selatan is one of the elementary schools that continues to strive to improve the quality of student learning and development. However, in the learning process, there are still various

challenges faced by teachers, such as differences in student abilities, lack of learning motivation, limited learning media, and variations in teaching methods (Puspitarini & Hanif, 2019; Bahri, 2024). These challenges can affect the development of grade 4 students both academically and socially. Therefore, it is necessary to conduct research to analyze how the development of students in class 4 at SDN 1 Suwawa Selatan occurs and what factors influence it.

The development of students can be seen from several aspects, namely cognitive development, social development, emotional development, and learning skills. Cognitive development relates to the ability of students to think, understand, remember, and solve problems. Social development relates to how students interact with friends, teachers, and the surrounding environment. Emotional development relates to students' ability to control feelings, show empathy, and build self-confidence. Meanwhile, learning skills development includes reading ability, writing ability, communication skills, and the ability to work in groups. These aspects must develop in a balanced way so that students can achieve optimal learning outcomes. These aspects must develop in a balanced way so that students can achieve optimal learning outcomes (Setiana & Eliasa, 2024; Baharudin et al., 2025).

In the learning process, teachers have an important role as facilitators, motivators, and guides for students. Teachers are required to be able to design learning that is interesting, active, and meaningful. Learning that only focuses on lectures tends to make students passive and less enthusiastic. Therefore, teachers need to apply various learning models such as cooperative learning, project-based learning, and contextual learning so that students can be more active in the learning process. By using appropriate learning strategies, student development can occur more optimally (Darling-Hammond et al., 2020; Hattie & Donoghue, 2016; Bhardwaj et al., 2025). Another factor that influences student development is the family environment. Parents play an important role in supporting children's learning at home. Students who get attention and guidance from parents usually show better development compared to students who lack support at home. In addition, the school environment also influences student development, including relationships with peers, school discipline, and the availability of learning facilities (Assefa, 2026; Rafiq et al., 2022; Tan Jie, 2024). A positive school environment can encourage students to be more confident, active, and motivated to learn. Therefore, teachers need to apply various learning models such as cooperative learning, project-based learning, and contextual learning so that students can be more active in the learning process (Handayani & Kurniawan, 2021; Hadistia et al., 2025; Muakhiroh, 2022). By using appropriate learning strategies, student development can occur more optimally (Rahmawati & Suryadi, 2021; Pratama & Abidin, 2020).

Based on initial observations at SDN 1 Suwawa Selatan, it was found that the development of grade 4 students varies greatly. Some students show good academic ability and active participation in class, while others still have difficulties in reading comprehension, writing, and understanding lessons (Durroh et al., 2025; Pulukadang et al., 2025). By knowing the level of student development, teachers can determine appropriate learning strategies (Setiawan & Sudrajat, 2022). In addition, there are students who are less confident when asked to speak in front of the class, and some students prefer to play rather than pay attention to the lesson. This condition shows that student development has not been evenly distributed, so it is necessary to analyze the causes and find appropriate solutions. Research on student development is important to help teachers understand the real conditions of students in the classroom. By knowing the level of student development, teachers can determine appropriate learning strategies. In addition, research results can also be used as evaluation material for schools to improve the quality of education. Schools need to ensure that the learning process supports the development of students in all aspects, not only academic achievement but also character and social skills.

This research focuses on the development of grade 4 students at SDN 1 Suwawa Selatan because this grade level has learning characteristics that require more independence and responsibility from students (Arrahmi et al., 2025). At this stage, students begin to be required to complete assignments independently, work in groups, and understand more

complex subject matter. If students do not experience proper development at this stage, it may affect their learning process in higher grades. Therefore, this study aims to analyze the development of class 4 students at SDN 1 Suwawa Selatan and identify the factors that influence their development. The results of this research are expected to provide benefits for teachers, schools, and parents in improving the quality of learning and supporting student development optimally. In addition, this research is also expected to become a reference for further studies related to student development in elementary schools, especially in the context of improving the quality of education in Indonesia.

2. Methods

2.1 Research design and setting

This study employed a qualitative descriptive research design to examine the developmental characteristics of fourth-grade students at SDN 1 Suwawa Selatan. A qualitative approach was selected because it enables researchers to explore students' cognitive abilities, learning behaviors, classroom participation, and social interactions within their natural educational environment. Rather than measuring development solely through numerical indicators, this approach provides a contextual description of how students respond to learning activities and interact with teachers and peers. The research was conducted at SDN 1 Suwawa Selatan, Bone Bolango Regency, Gorontalo Province, Indonesia. The school was selected as the research setting because it provides a natural elementary school context for observing students' cognitive and social development during classroom activities. The study specifically focused on fourth-grade students, who are generally considered to be within the concrete operational stage of cognitive development, characterized by increasing abilities in logical reasoning, problem-solving, classification, and understanding concrete concepts.

2.2 Research subjects

The subjects of this study were 15 fourth-grade students at SDN 1 Suwawa Selatan, consisting of 8 boys and 7 girls. The participants represented the entire population of students enrolled in the fourth-grade class during the research period. Using the entire class as research subjects enabled the researcher to observe variations in students' cognitive abilities, learning motivation, classroom participation, and social interactions. The selection of the participants was therefore based on a total population approach rather than probabilistic sampling. This approach was considered appropriate because the study aimed to provide a contextual description of the developmental characteristics of students within the selected classroom rather than to generalize the findings to elementary school students more broadly.

2.3 Data collection techniques and instruments

Data were collected through classroom observation, teacher interviews, and documentation. Classroom observation served as the primary technique for recording students' behaviors during learning activities, including their attention, participation, interaction with teachers and peers, collaboration, understanding of concepts, and problem-solving abilities. Direct observation allowed the researcher to examine students' developmental characteristics as they naturally appeared during classroom activities.

Interviews were conducted with the classroom teacher to obtain additional information concerning students' learning progress, academic abilities, learning difficulties, behavioral patterns, and developmental characteristics. The teacher's perspective complemented the observational findings by providing information based on sustained interaction with the students. Documentation was used as supporting evidence and included students' assignments, learning assessment results, and lesson plans.

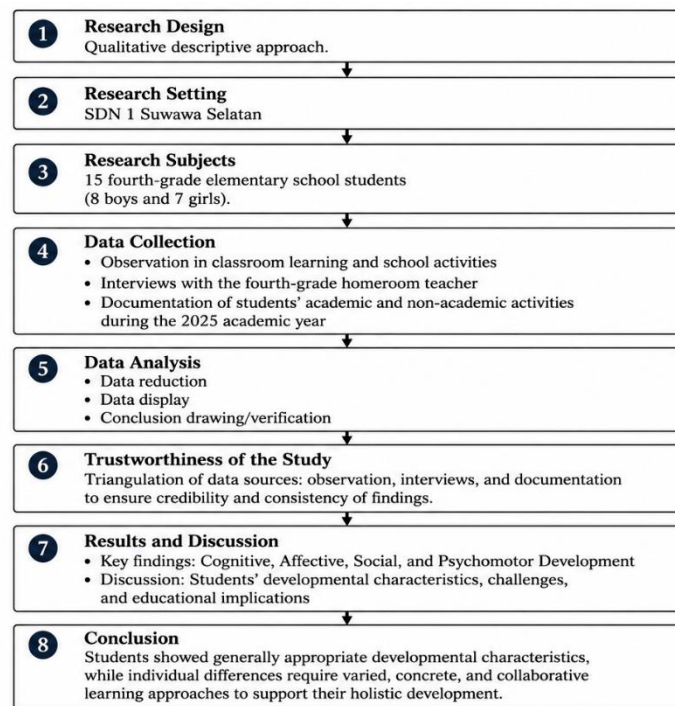


Fig 1. Research Process of the Study

Figure 1 illustrates the research process conducted in this study, beginning with the selection of a qualitative descriptive research design and the determination of the research setting and subjects. The process continued with data collection through classroom observations, interviews with the fourth-grade homeroom teacher, and documentation of students' academic and non-academic activities. The collected data were analyzed through data reduction, data display, and conclusion drawing and verification. Data trustworthiness was ensured through triangulation of observation, interview, and documentation data. The findings were then presented and discussed based on students' cognitive, affective, social, and psychomotor development, leading to conclusions regarding students' developmental characteristics and the implications for learning approaches.

2.4 Data analysis, data interpretation and trustworthiness

The collected data were analyzed using a qualitative descriptive procedure consisting of data reduction, data display, and conclusion drawing. During data reduction, information obtained from observations, interviews, and documentation was reviewed, selected, and summarized according to its relevance to the research objectives. Particular attention was given to recurring patterns related to students' cognitive abilities, learning behaviors, participation, interaction, and problem-solving processes. Following data reduction, the relevant information was organized and presented in descriptive form. Data from different sources were compared to identify consistent patterns and differences in students' developmental characteristics. The findings from classroom observations were interpreted alongside teacher interview responses and documentary evidence to provide a more comprehensive understanding of the students' learning and developmental conditions (Sugiyono, 2019).

The final stage involved drawing conclusions based on the patterns identified across the collected data. Interpretations were developed by considering evidence from observations, interviews, and documentation rather than relying on a single source of information. This process enabled the researcher to describe the developmental characteristics of the fourth-grade students in relation to their classroom learning experiences. To strengthen the credibility of the findings, the researcher compared information obtained through the three data collection techniques. Consistencies between

observed classroom behaviors, teacher accounts, and documented learning evidence were used to support the interpretation of students' developmental characteristics. The conclusions were subsequently formulated in accordance with the evidence collected during the research process and within the contextual limitations of the selected classroom.

3. Results and Discussion

3.1 Research results

The results of this study describe the developmental characteristics of fourth-grade students at SDN 1 Suwawa Selatan based on classroom observations, interviews with teachers, and documentation. The research involved 15 students consisting of 8 boys and 7 girls. The characteristics of the research participants are presented in Table 1.

Table 1. Characteristics of research participants

Characteristics	Amount
Males	8
Females	7
Total	15

Overall, the findings indicate that the development of students in this class generally aligns with the characteristics of children aged around 9–10 years, particularly in the aspects of cognitive development, learning ability, and social interaction. Based on classroom observations, most students showed active participation during the learning process. Students were enthusiastic when the teacher delivered lessons using interactive methods such as discussions, question-and-answer sessions, and learning activities involving concrete objects. This indicates that the learning environment created by the teacher plays an important role in encouraging student engagement and participation in the classroom.

From the cognitive development perspective, most students demonstrated characteristics that correspond to the concrete operational stage as proposed by Piaget. At this stage, children begin to develop logical thinking skills, but their understanding is still closely related to real or concrete objects. Students found it easier to understand learning materials when teachers used visual aids or concrete examples. In mathematics learning, for example, students were able to understand basic arithmetic operations such as addition, subtraction, and simple multiplication more easily when the teacher used learning media such as number blocks and popsicle sticks. These concrete objects helped students visualize mathematical concepts and understand the relationship between numbers more clearly.

The observation results also showed that 11 out of the 15 students were able to complete simple multiplication exercises correctly when supported by visual aids and teacher guidance. These students demonstrated an understanding of the concept of repeated addition and were able to apply it to solve simple mathematical problems given in the classroom. However, four students still experienced difficulties in understanding multiplication concepts. These students often relied on memorizing multiplication tables without fully understanding the underlying concept. As a result, they sometimes made mistakes when solving problems that required logical reasoning.

To address these difficulties, the teacher provided additional guidance and remedial learning activities. Individual assistance was given to students who needed more support so that they could gradually understand the mathematical concepts being taught. In Indonesian language learning, students generally demonstrated adequate reading abilities. In terms of reading comprehension, students were able to identify explicit information from reading texts, such as the main character, setting, and important events in the story. This shows that their literal comprehension skills are developing appropriately. However, when students were asked to summarize the content of the reading using their own words, several students still experienced difficulties. Many students tended to repeat sentences from the

text rather than expressing the ideas in their own language (Kulsum et al., 2023). Most students were able to read short texts with clear pronunciation and correct intonation. This indicates that their basic reading skills have developed well for their grade level.

In terms of reading comprehension, students were able to identify explicit information from reading texts, such as the main character, setting, and important events in the story. This shows that their literal comprehension skills are developing appropriately. However, when students were asked to summarize the content of the reading using their own words, several students still experienced difficulties. Many students tended to repeat sentences from the text rather than expressing the ideas in their own language. This condition indicates that higher-level reading comprehension skills, such as interpreting and summarizing information, still need to be strengthened through guided reading activities and classroom discussions.

Another finding from this study shows that students were more motivated when learning activities involved visual media, storytelling, or group collaboration. The use of engaging learning media can provide students with greater opportunities to participate actively in learning activities and may support their learning engagement (Aryfien et al., 2025). These learning methods created a more engaging atmosphere and encouraged students to participate more actively. During group learning activities, students showed good cooperation and social interaction. They were able to share ideas, help classmates who experienced difficulties, and complete tasks together. This reflects positive social development among students.

The teacher also explained that there are noticeable differences in the learning abilities of students in the classroom. Some students are able to understand the lesson quickly, while others require more time and repeated explanations. These differences are influenced by several factors, including students' learning motivation, prior knowledge, and the level of support they receive from their families at home. Students who receive regular guidance from their parents at home, particularly in reading and completing homework, tend to demonstrate better academic performance compared to students who have limited learning support outside school.

In addition, the study found that students became more confident in expressing their opinions when the teacher created a supportive and non-threatening classroom environment. When students felt comfortable, they were more willing to ask questions and share their ideas. The use of contextual learning strategies also contributed to students' understanding of the subject matter. When teachers connected lessons to real-life situations, students were able to relate the concepts to their daily experiences. Overall, the learning process at SDN 1 Suwawa Selatan shows positive results in supporting students' academic and social development. Most students are progressing according to their developmental stage and demonstrate the potential to achieve better learning outcomes.

Therefore, it can be concluded that the use of appropriate teaching strategies, concrete learning media, and a supportive learning environment plays an important role in enhancing the development of fourth-grade students at SDN 1 Suwawa Selatan/Suwawa Selatan 1 State Elementary School. Continuous guidance from teachers and support from parents are also essential to help students overcome learning difficulties and improve their academic abilities. Observations of 15 students—8 boys and 7 girls—indicated that the majority of fourth-grade students at SDN 1 Suwawa Selatan/Suwawa Selatan 1 State Elementary School were in the concrete operational stage, as proposed by Piaget. Students demonstrated the ability to understand basic concepts such as grouping, comparison, and cause-and-effect relationships through concrete examples. In mathematics learning activities, for example, students found it easier to understand arithmetic operations when teachers used concrete objects such as popsicle sticks and number blocks. Eleven of the 15 students were able to complete simple multiplication exercises when presented with visual aids, while the remaining four students still experienced difficulties and required additional guidance.

In Indonesian, students' reading comprehension skills are in the moderate to good category. Students are able to extract explicit information from short reading texts, but their

ability to summarize the content abstractly is still limited. This aligns with the characteristics of elementary school-age cognitive development, which prioritizes concrete information (Desmita, 2017). Teachers also noted significant differences in cognitive abilities between students, particularly between those who received home learning support and those who did not. Research data shows that students' affective development is evident through their learning motivation, attitudes toward learning, and discipline. Most students demonstrated enthusiasm for learning, especially when teachers used methods involving physical activity or educational games. However, observations revealed that five students easily lost focus, especially during long lessons without any breaks (Shi & Cheung, 2024).

The social development of fourth-grade students showed mixed results. Most students were able to interact well, work in groups, and participate in class discussions. Group activities in science lessons showed that 10 students were able to work together effectively, divide tasks, and complete simple experiments. However, 5 students still demonstrated difficulties in cooperation, such as being reluctant to share tools or dominating the group.

Several students also showed a tendency to be shy in certain situations, especially girls who were less confident in expressing their opinions in front of the class. These social interaction patterns are influenced by personality factors and family background. Teachers stated that students who receive social stimulation from their families adjust more quickly to their peers. This finding aligns with Erikson's (1994) theory, which states that elementary school is a stage of seeking competence, so children need a supportive social environment. Students' psychomotor skills appeared quite good. All students demonstrated good gross motor coordination through sports activities such as running, jumping, and traditional games. In fine motor skills, students demonstrated fairly good writing, drawing, and cutting skills. However, three students still had difficulty writing quickly and neatly, requiring additional practice.

In Arts and Crafts (SBdP) lessons, students showed enthusiasm while making simple weavings and painting. These activities demonstrated the gradual development of fine motor skills. According to Gallahue & Ozmun (2006), the psychomotor development of elementary school-aged children is closely related to the intensity of exercise and the type of physical activity provided, so a variety of activities is crucial to maximize these abilities.

Overall, these findings indicate that the social and psychomotor development of fourth-grade students was generally progressing appropriately, although individual differences remained evident. Variations in students' confidence, cooperation, and fine motor abilities suggest that developmental outcomes are not uniform and may require differentiated learning support. Therefore, classroom activities that combine collaborative interaction, physical movement, creative tasks, and opportunities for individual expression are important to accommodate these developmental differences. Such activities can help strengthen students' social competence while simultaneously supporting the development of their motor skills. To provide a more concise overview of the research results, the main findings based on aspects of student development are presented in Table 2. To provide a more concise overview of the research results, the main findings based on aspects of student development are presented in Table 2.

Table 2 indicates that the developmental characteristics of the fourth-grade students were generally positive across cognitive, affective, social, and psychomotor aspects, although individual differences remained evident. The findings show that students responded more effectively to concrete, engaging, and varied learning activities. At the same time, several students still required additional support in cognitive tasks, maintaining attention, social participation, and fine motor activities. These findings indicate the importance of adapting learning strategies to students' developmental characteristics and individual needs. Cognitive development was relatively strong, particularly in tasks involving concrete learning media, while affective development was reflected in students' generally positive motivation and enthusiasm. Social development also showed favourable patterns through cooperation and classroom interaction, although some students continued to experience difficulties in confidence and group participation.

Table 2. Summary of research findings and discussion based on student developmental aspects

Developmental aspects	Research findings	Interpretation and implication
Cognitive	Most students demonstrated thinking skills at the concrete operational stage. Eleven of the 15 students were able to complete multiplication exercises with the help of concrete media, while four students still required guidance. Several students also experienced difficulties in summarizing reading texts using their own words.	Students generally demonstrated cognitive development appropriate to their age, particularly when learning activities involved concrete examples and visual support. Differences in learning abilities indicate the need for varied learning strategies and additional guidance.
Affective	Most students demonstrated enthusiasm and motivation during learning activities. However, five students easily lost focus, particularly during lengthy learning activities without breaks.	Students' affective development was generally positive, although attention and motivation varied among individuals. Engaging and varied learning activities may help maintain students' attention and participation.
Social	Most students were able to interact with peers, participate in group discussions, share tasks, and help classmates. Ten students demonstrated good cooperation, while five students still experienced difficulties in cooperation or expressing their opinions.	Students generally demonstrated positive social development, although some students required further support in developing confidence, communication, and cooperation.
Psychomotor	Students demonstrated good gross motor coordination through sports and traditional games. Fine motor skills were also generally good through writing, drawing, cutting, weaving, and painting. However, three students still experienced difficulties in writing quickly and neatly.	Students' psychomotor development was generally appropriate, although individual differences remained evident, particularly in fine motor skills. Varied physical, artistic, and practical activities can support continued development.

The findings further suggest that these developmental aspects are interconnected rather than occurring independently. Students' ability to participate actively, cooperate with peers, and engage in learning activities may support both cognitive and affective development, while physical and creative activities can strengthen psychomotor skills and classroom engagement. Therefore, learning strategies that integrate concrete learning experiences, collaborative activities, and varied physical and creative tasks may provide more appropriate support for the diverse developmental needs of fourth-grade students.

To further present the empirical data obtained from classroom observations, Table 3 summarizes the number and percentage of students who demonstrated specific developmental indicators. The table provides a quantitative description of the findings that have been discussed previously and highlights individual differences among the students.

Table 3 shows that most students demonstrated positive developmental characteristics across the observed indicators. All 15 students demonstrated good gross motor coordination, while 11 students (73.3%) were able to complete simple multiplication exercises with the support of concrete or visual learning media. However, individual differences were also evident. Four students (26.7%) experienced difficulties in understanding multiplication concepts, five students (33.3%) easily lost focus during lengthy learning activities, and five students (33.3%) experienced difficulties in cooperation during group activities. In the psychomotor aspect, three students (20.0%) experienced difficulties in writing quickly and neatly. These findings indicate that although the overall development of the students was positive, several students still required additional guidance and learning support according to their individual needs.

Overall, the observations revealed notable variations in students' developmental progress. To provide a more systematic overview of these findings, the results are presented

in the following table. This presentation aims to give readers a clearer picture of the distribution of developmental indicators across cognitive, affective, social, and psychomotor aspects.

Table 3. Empirical observation results of fourth-grade students' development

Developmental aspects	Observed indicator	Students showing the indicator	Percentage
Cognitive	Students who were able to complete simple multiplication exercises using concrete or visual learning media	11	73.3%
Cognitive	Students who experienced difficulties in understanding multiplication concepts	4	26.7%
Affective	Students who easily lost focus during lengthy learning activities	5	33.3%
Social	Students who demonstrated effective cooperation during group activities	10	66.7%
Social	Students who experienced difficulties in cooperation during group activities	5	33.3%
Psychomotor	Students who demonstrated good gross motor coordination	15	100%
Psychomotor	Students who experienced difficulties in writing quickly and neatly	3	20.0%

The data presented in Table 3 shows that the majority of students demonstrated positive developmental outcomes, particularly in the psychomotor domain with strong gross motor coordination. Nevertheless, several students encountered challenges in cognitive, affective, and social aspects. These findings emphasize the importance of adopting more adaptive and differentiated teaching strategies so that each student receives support tailored to their developmental needs. In this way, teachers can design more targeted interventions to assist students who face difficulties while continuing to nurture the potential of those who are already progressing well.

3.2 Discussion

Research findings indicate that the development of fourth-grade students at SDN 1 Suwawa Selatan closely aligns with classical developmental theories such as Piaget's and Erikson's. Students' cognitive abilities, which are predominantly focused on concrete concepts, indicate that experiential learning is the most relevant strategy. Teachers can reinforce this development by providing more concrete media, demonstrations, and hands-on practice. Student development is influenced not only by internal factors such as interest, basic abilities, and motivation, but also by external factors such as parental support and the quality of teaching. Students who receive tutoring at home tend to grasp subject matter more quickly, while students with little parental supervision show slower development. These results support Sumantri's (2015) opinion that the family environment plays a significant role in a child's academic and social development.

One of the main challenges identified in this study is the differences in learning abilities between students. Male students often exhibit more active behavior, get bored easily, and require physical activity to maintain focus, while female students tend to be more organized but lack confidence in public speaking. Teachers need to implement differentiated learning, provide opportunities for all students to participate, and offer a variety of activities that suit each child's individual learning style. The results of this study emphasize the importance of implementing active learning methods such as project-based learning, educational games, and the use of concrete media. Such approaches are consistent with constructivist learning principles, which emphasize active student involvement and meaningful learning experiences (Sudarman et al., 2024). This approach not only supports cognitive

development but also enhances students' motivation, social interaction, and psychomotor skills. Furthermore, collaboration between schools and parents needs to be strengthened through regular communication and parental involvement in classroom activities.

The research findings also indicate the need for mentoring programs for students experiencing developmental delays, whether cognitive, social, or psychomotor. Early intervention is crucial to prevent widening developmental gaps. Teachers can conduct ongoing assessments and design remedial programs tailored to each student's individual characteristics. Based on the results of the study conducted on fourth-grade students at SDN 1 Suwawa Selatan, it was found that student development can be observed through several important aspects, namely cognitive, social, emotional, and learning skills. This research was carried out through classroom observations, interviews with teachers, and documentation of learning activities during the research process. The data obtained indicate that most students have shown fairly good development in participating in the learning process at school, although there are still some students who require special attention in certain aspects.

From the cognitive aspect, the development of fourth-grade students shows a significant improvement, especially in their ability to understand the learning materials delivered by the teacher. Students are able to read texts properly, comprehend the content of the reading, and answer questions related to the lesson material. This can be seen from the results of learning evaluations, which show that most students are able to achieve scores above the minimum mastery criteria set by the school. In addition, students have begun to express their opinions and respond to questions asked by the teacher during the learning process. In terms of learning skills, fourth-grade students at SDN 1 Suwawa Selatan demonstrate fairly good abilities in participating in classroom learning activities. Students appear active in group discussions, completing assignments given by the teacher, and participating in question-and-answer sessions. Learning activities that involve discussion methods and group work have a positive impact on the development of students' learning skills. Through these activities, students learn to collaborate with peers, exchange ideas, and solve problems together.

Besides cognitive and learning skill development, students' progress can also be observed from the social aspect. Based on the observation results, most students are able to interact well with their classmates and teachers. Students show attitudes of mutual respect, cooperation in group activities, and effective communication during the learning process. This indicates that the school environment plays an important role in shaping students' social abilities. However, this study also found that several students still experience difficulties in participating in the learning process optimally. These difficulties are mainly related to understanding the lesson material and a lack of confidence in expressing opinions in front of the class. Some students were also less active during group discussions and tended to rely on more active peers. This condition indicates that teachers need to provide special attention to students who face such difficulties so that they can develop more optimally.

To address these problems, teachers implemented several learning strategies aimed at increasing student involvement in the learning process. One of the strategies applied was the use of varied teaching methods, such as group discussions, educational games, and the use of interesting learning media. Through these approaches, students are expected to be more motivated to participate in classroom activities and become more confident in expressing their ideas. Furthermore, teachers also provided individual guidance to students who experienced learning difficulties. This guidance was conducted by offering additional explanations for materials that students had not fully understood and by encouraging them to build confidence in participating in classroom learning. This individual approach proved to be quite effective in helping students understand the learning materials better.

The results of this study also show that support from the school environment and family plays a significant role in supporting student development. Students who receive support from their parents tend to demonstrate better academic progress compared to those who receive less attention from their families. Therefore, cooperation between the

school and parents is essential to create a supportive learning environment that encourages students' development. Overall, the development of fourth-grade students at SDN 1 Suwawa Selatan/Suwawa Selatan 1 State Elementary School shows positive results. Most students demonstrate good progress in cognitive, social, and learning skill aspects. Nevertheless, continuous efforts from teachers and the school are still needed to assist students who face learning difficulties so that they can achieve optimal development.

In conclusion, the findings of this study indicate that effective learning processes, the use of varied teaching strategies, and support from both the school and family environments are important factors that influence the development of elementary school students. Therefore, teachers are expected to continuously develop innovative and engaging learning strategies so that the learning process becomes more effective and can improve students' overall development. The development of fourth-grade students at SDN 1 Suwawa Selatan shows that the learning process in elementary school has a significant influence on students' cognitive, social, emotional, and behavioral growth. Based on the results of observations during the learning process, it can be seen that each student has different levels of development. These differences are influenced by internal factors such as intelligence, motivation, and self-confidence, as well as external factors such as family environment, school environment, and teaching methods used by teachers. Therefore, the development of students cannot be seen from only one aspect, but must be analyzed comprehensively.

From the cognitive aspect, most fourth-grade students have begun to show the ability to think logically, although they still need concrete examples to understand the subject matter. Students can follow lessons well when the teacher uses visual media, pictures, or real objects. However, when the learning process only uses lecture methods, some students tend to lose focus and have difficulty understanding the material. This shows that the learning method greatly affects students' cognitive development. At this age, students need active learning that involves them directly so that their thinking skills can develop optimally (Romdhon et al., 2024). At this age, students need active learning that involves them directly so that their thinking skills can develop optimally (Romdhon et al., 2024). In addition, differences in academic ability among students are still clearly visible. Some students can complete assignments quickly and correctly, while others need more time and guidance from the teacher. Students who have good reading skills usually find it easier to understand lessons, while students who still have difficulty reading tend to experience problems in almost all subjects. This condition shows that basic literacy skills greatly influence student development in grade 4. Therefore, teachers need to provide additional guidance for students who still have difficulty reading and writing so that they can follow the learning process better.

From the social aspect, fourth-grade students have begun to show better interaction with their peers compared to lower-grade students. Students are able to work in groups, share tasks, and help each other in completing assignments. However, some students still prefer to work alone or are less active in group discussions. This condition usually occurs in students who lack self-confidence or are less accustomed to communicating with friends. The teacher's role is very important in encouraging students to be more active and confident in interacting with others. Social development is also influenced by the classroom atmosphere. When the teacher creates a pleasant learning environment, students tend to be more active and enthusiastic. On the other hand, if the learning atmosphere is tense, students become quiet and less willing to express their opinions. Therefore, the teacher must be able to create a learning environment that is comfortable, safe, and supportive so that students can develop socially and emotionally.

From the emotional aspect, the development of grade 4 students shows that they are starting to be able to control their emotions, although sometimes they still show unstable behavior. Some students become easily angry, offended, or discouraged when they have difficulty completing assignments. However, there are also students who show good emotional control and are able to accept criticism from the teacher. Emotional development at this age requires guidance from teachers and parents so that students can learn to manage their feelings properly. Motivation to learn is another important factor in student

development. Students who have high motivation usually pay more attention to the teacher, actively ask questions, and complete assignments seriously. Meanwhile, students who lack motivation tend to be passive and easily distracted during the learning process (Mardotilla et al., 2024). Based on the observations, student motivation is influenced by the teaching methods used by the teacher. When the teacher uses interesting media, games, or group activities, students become more enthusiastic about participating in the lesson.

The family environment also has a strong influence on student development. Students who receive support from parents usually show better learning outcomes and more positive behavior at school. Parents who pay attention to their children's learning, help with homework, and communicate with teachers can encourage children to be more responsible. On the other hand, students who lack parental supervision sometimes show low learning motivation and less discipline. This shows that cooperation between school and parents is very important in supporting student development. In addition to the family environment, school facilities also affect the learning process. At SDN 1 Suwawa Selatan, learning facilities are sufficient to support the teaching process, but they are not always used optimally.

Another important factor is the teaching strategy used by the teacher. Learning that involves students actively, such as group discussions, demonstrations, and practice activities, can improve student understanding and confidence. This approach is consistent with constructivist learning principles that emphasize active participation and meaningful learning experiences (Phinla et al., 2024). Students feel more interested when they are involved directly in the learning process. Therefore, teachers need to vary learning methods so that students do not feel bored and remain motivated to learn. Overall, the development of class 4 students at SDN 1 Suwawa Selatan shows positive progress, although there are still several obstacles that need to be improved. Differences in ability, lack of motivation in some students, and limited use of learning media are factors that influence the learning process. However, with proper guidance from teachers, support from parents, and a conducive school environment, student development can improve significantly. The results of this study indicate that student development must be supported by cooperation between teachers, parents, and schools. Teachers must design learning that is appropriate to the developmental stage of students, parents must provide support at home, and schools must provide facilities that support the learning process. If these three elements work together well, the development of students in grade 4 at SDN 1 Suwawa Selatan can run optimally and help students achieve better learning outcomes in the future.

4. Conclusions

Research on the development of fourth-grade students at SDN 1 Suwawa Selatan shows that their development is at a stage consistent with the characteristics of elementary school age. In terms of cognitive skills, most students have demonstrated concrete operational thinking skills, characterized by their ability to understand material through real-world examples, the use of concrete media, and practical activities. However, differences in ability between students are still significant, necessitating teachers' adoption of a more adaptive learning approach.

In terms of affective aspects, students' learning motivation is generally good and is influenced by the teacher's reinforcement style. Discipline and the ability to maintain focus remain challenges for some students, especially those who tend to be physically active. Students' social interactions show positive development, with most able to work collaboratively in groups and communicate effectively. However, some students still need reinforcement in expressing their opinions and participating in class discussions.

Meanwhile, psychomotor skills demonstrated fairly optimal development. Students were able to effectively perform gross and fine motor skills through sports, arts, and crafts. These findings demonstrate the importance of providing a variety of physical and creative activities to support optimal psychomotor development. Overall, the development of fourth-grade students at SDN 1 Suwawa Selatan/Suwawa Selatan 1 State Elementary School is within the developmental stage for their age, but they still require guidance, enrichment,

and more diverse learning strategies to optimize all dimensions of development. Collaboration between the school, teachers, and parents is key to ensuring that each student's developmental needs are fully met.

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The authors declare no conflict of interest.

Declaration of Generative AI Use

During the preparation of this work, the author used Grammarly to assist in improving the grammar, clarity, and academic tone of the manuscript. After using this tool, the author reviewed and edited the content as needed and took full responsibility for the content of the publication.

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