



## **A Holistic Inclusive Education Approach to Character Development of Students with Special Needs**

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**Abstract:** Everyone has the right to education, including children with special needs. Education aims to shape character, develop thinking skills, and foster empathy. The purpose of this study is to analyze the development of independence and perseverance in students with special needs through a holistic, inclusive education approach and to identify supporting and inhibiting factors. This study employed a qualitative descriptive approach with a case study method. The research was conducted at Kalitapen 1 Elementary School, located in Purwojati District, Banyumas Regency, selected based on specific criteria and local wisdom as a representative case reflecting the dynamics of inclusive education in the region. The research participants included classroom teachers, students with hearing and speech impairments, students with learning disabilities, and parents. The object of the study was the educational ecosystem involved in implementing the holistic inclusive approach. Qualitative data were collected through observations and interviews. Data were analyzed using qualitative procedures, including data collection, reduction, and interpretation. The findings indicated that the holistic development of independence and perseverance among deaf students and slow learners was fostered through the synergy of prompt-based instructional methods, family partnerships, and the strengthening of self-awareness. Holistic, context-based character education was found to function as a transformative process that internalizes values into daily habits, making it particularly relevant and effective for students with special needs.

**Keywords:** children with special needs, holistic, inclusive

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### **Introduction**

The urgency of character education is increasingly crucial amid the rapid pace of globalization and social changes that have the potential to erode the nation's noble values. The integration of character values through character education needs to be improved through classroom learning activities and habits. Students have diverse needs with unique characteristics. Western culture that has entered Indonesia is considered modern, so students are unable to filter it, which ultimately leads to conflict with the cultural values that apply in Indonesia (Imtinan et al., 2022). Education is an important element in building civilization because it provides direction and guidance for advancing human resources. National education serves to develop students' abilities and shape their character with dignity.

Regular schools and inclusive schools are strategic partners for families and communities to strengthen character optimally. Parents, as the main resource for character development, consider schools to be “quality of education, discipline values, facilities and resources, reputation and credibility...” (Darwanto et al., 2024). This opinion can be defined as follows: schools are the most strategic, organized, and long-term institutions for integrating informal education in the family with formal education in accordance with society's demands, thereby becoming a holistic, continuous character education process.

Article 31, Paragraph 1, of the 1945 Constitution states, “Every citizen has the right to education,” meaning that every Indonesian citizen has the right to education and learning. The instilling of character

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values faces complex challenges when implemented in students with special needs (SWD). Students with special needs have very diverse learning barriers and modalities, requiring different approaches, strategies, and assessments from regular students. These challenges lie not only in the cognitive but also in the affective and psychomotor aspects, where internalization is a long-term process and lifelong learning is required.

Currently, education and learning for students with special needs are provided in special schools (SLB) and inclusive schools, depending on their category. Inclusive education is an educational service system that provides opportunities for children with special needs to attend regular classes in schools near their homes alongside their peers (Fatmawiyati & Permata, 2023). This is intended to provide equal opportunities for students with special needs, as regulated by law, to study alongside regular students in inclusive classes.

The concept of inclusive education is regulated by Permendiknas No. 70 of 2009, which serves as a guideline for regular schools to accept and provide meaningful services to students with disabilities in accordance with their needs. In practice, the implementation of inclusive education in Indonesia is still marked by various multidimensional challenges. The development of inclusive education in Indonesia also continues to experience fluctuations. Data from <https://www.kompas.com/>, Coordinator of the Inclusive Education Working Group, Directorate of Community Education and Special Education, Ministry of Education and Culture, Meike Anastasia, shows that as of December 2023, there are 40,164 formal educational units (schools) in Indonesia that have students with disabilities.

Limited government funding for inclusive education is also an obstacle to providing education for students with dual hearing and speech impairments and learning disabilities in regular schools, underscoring the need to evaluate and prioritize funding to address diverse learning needs. Other studies show the need to adjust the allocation of BOS funds to special schools based on an analysis of actual operational needs, the complexity of the needs of students with disabilities, and the level of education, as well as strengthening financial support for families to ease the burden of inclusive education costs (S. Dewi & Jasmina, 2023).

The facts on the ground show that only 5.956 schools, or 14.83 % of the total number of schools in 2022, have special guidance teachers for children with special needs. It can therefore be concluded that there is a gap between regulations on inclusive education and the situation on the ground. This regulation is in stark contrast to the situation on the ground, as only 64% of children with disabilities attend school due to reasons such as cost, learned helplessness, and rejection from schools. Setting a framework for collaboration among teachers and pupils enabled the study participants to engage in inclusive education practices while learning to take into account learners' sociocultural contexts (Lapidot-Lefler, 2025). This states that collaboration between teachers and students with special needs enables inclusive education practices and thereby develops their sociocultural environment.

This is in line with research conducted by Rosmida (Rosmida et al., 2025), which shows that the efforts of teachers and parents in overcoming the learning difficulties of autistic students include solutions applied by teachers such as waiting for the child's mood to improve before the learning process, providing entertainment, and asking parents to repeat the material at home. In addition, improving the quality of learning for autistic children requires ongoing efforts, including teacher training, curriculum development, the addition of learning media, communication with parents, and emotional support for children. This is reinforced by research by Pujaningsih (2025) on the collaborative implementation of positive behavioural support in schools, which successfully improved students' appropriate behaviour among those with emotional and behavioural problems in Indonesia, although verbal involvement still requires ongoing support. These findings demonstrate the effectiveness of teacher-driven relationship-based strategies and their important implications for the development of inclusive education policies. It can therefore be concluded that parental and teacher support in developing the potential and character of students with special needs is crucial.

“The era of globalization has triggered the acceleration of science, technology, and information, which has had an impact on various facilities, efficiency, and effectiveness. This is especially true in the field of education, which requires the strengthening of positive values in the minds of students in a concrete and sustainable manner, touching on various aspects to remain relevant amid the complex storm of change.” (Badri & Malik, 2024). The above statement emphasizes the importance of instilling positive values concretely in students' souls as a whole so that they can adapt and maintain integrity amid complex changes.

Children with disabilities, whether they are slow learners or have dual hearing and speech impairments, need to be taught independent living skills to meet their future needs when their support system is no longer available. Research by Alshuayl (2025) identified four main challenges in the transition to adulthood for people with disabilities: (1) limited pedagogical competence of teachers, (2) lack of systemic transition-oriented services, (3) inadequate supporting infrastructure, and (4) low social expectations for their future (Alshuayl, 2025). The character of independence for students with disabilities is not only a provision for themselves, but also preparedness in the event of a disaster. Children with disabilities are among the groups of students who need disaster training. Research shows that students with disabilities are among the most vulnerable during disasters, yet they are often excluded from disaster risk reduction initiatives. Early disaster education offers significant benefits for inclusive preparedness (Rofiah & Kawai, 2025).

Banyumas Regency is one of the regions that has declared the implementation of inclusive education since 2016. Data shows that the number of educational units implementing inclusive education increased in 2021, to 623 schools, up from 406 in 2016, which were the only schools to declare themselves inclusive from kindergarten to special needs schools. This increase is inversely proportional to the number of special guidance teachers (GPK), which continues to decline. In 2016, there were 1,344 special guidance teachers; by 2021, only 1,226 remained.

Law No. 8 of 2016 concerning persons with disabilities strengthens their rights across various aspects of life, including education. The government is required to provide adequate accommodation for students with disabilities in both special schools and inclusive schools. Kistoro (2024) states that, "one of the efforts made by schools and teachers in restoring character education for students is to develop more meaningful learning in all subject matter in all curricula" (Kistoro et al., 2024).

One effort by schools and teachers in character education for students is to foster meaningful learning across all curricula. Based on research conducted by Cholilah et al., it was concluded that there is continuity between the curriculum based on the Indonesian National Qualifications Framework (KKNI) and the Merdeka Curriculum in implementing 21st-century learning (Cholilah et al., 2023). Thus, the Merdeka Curriculum can serve as a reference for handling students with special needs in inclusive schools.

Inclusive education and special schools need curricula that support the achievement of learning objectives for children with special needs, tailored to their needs. In implementing inclusive education, three curriculum models are used: the general curriculum, the modified curriculum, and the individualized curriculum (Rumatumia et al., 2024). Inclusive education is designed to accommodate the diverse needs of students with special needs and those without, so they can learn together and avoid stereotypes. Inclusive learning compels all public schools to accommodate all learners and implement curricula that meet their needs. (Nzuzza, 2023). The role of the teacher is not only to transfer knowledge or be the only source of learning; it is called teacher-centred. The teacher can also be a mediator and active facilitator to develop their acting potential (Dewi & Rukmini, 2019).

Garwood and Loan (Maulyda et al., 2021) state that students with special needs have unique learning styles that differ from those of regular children. Children with Special Needs (CSN) require optimal services and intensive assistance to develop their basic abilities. A learning model more suitable for children with special needs (ABK) must at least take into account the initial principle of convergence, which holds that, in addition to genetic factors, environmental factors also greatly shape a person (Arrahman et al., 2022). Rural schools face several challenges, including a scarcity of special education teachers and resource disparities, that directly impact students' academic performance and necessitate a more intensive, strategic approach from rural educators. Prioritizing technology-based instruction emerges as a viable solution to bridge gaps caused by geography (Lin & Riccomini, 2025).

Value, character, and moral education is a pedagogy that gives significant attention to human growth, namely the development of natural human abilities as possessed differently by each individual (Aryani & Yuliarti, 2023). In the development of natural human abilities, humans cannot ignore their negative relationship with the social environment, nor the relationship between individuals and society; they turn to values. Emotional intelligence has a significant influence on one's success. Goleman, through his research, said that emotional intelligence accounts for 80% of the determinants of a person's success, while the other 20% is determined by intellectual intelligence (Rasito et al., 2022).

The Research and Development Center for Religious Education and Security conducted a character survey of students. The survey results showed that secondary school students had a character

index of 69.52 in 2021. However, this character index score dropped to 71.41 in the previous year. It can be concluded that the 2021 character index score was lower than the previous year. This is also one of the effects of the pandemic that is still being felt today. The pandemic had an impact on the character index level of students in 2021. Nationalism, religiosity, independence, mutual cooperation, and integrity were the objects of the survey. Of the five survey objects, the only dimension with a participation rate of 74.26, higher than the previous year's 74.13. Apart from the other four dimensions, there was a decline in the dimension of independence, and it needs <https://balitbangdiklat.kemenag.go.id/>.

Based on the background of the problem, the researcher will conduct a Holistic Approach Analysis of the Application of Inclusive Education in educational units. Holistic education can increase creativity, critical thinking, effective communication, and teamwork (Pare & Sihotang, 2023). The object of analysis is the regular Kalitapen 1 Elementary School, which serves students with special needs at various levels and with diverse needs. This study will analyze the extent to which the character traits of independence and perseverance can be developed in students with dual hearing and speech impairments and slow learners within the framework of inclusive education. To optimize this strategic role, a comprehensive approach is needed. A holistic approach has emerged as a response to the failure of partial approaches that focus only on one aspect of development. A holistic approach views students as a whole, consisting of interconnected and inseparable physical, emotional, social, intellectual, and spiritual aspects.

### Methods

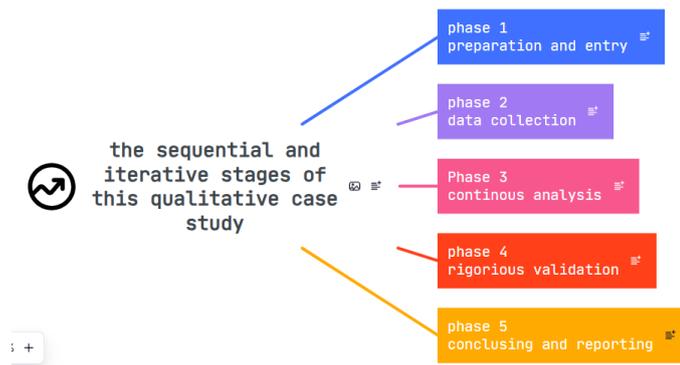
Based on the research focus, a qualitative approach with a descriptive case study design was employed. The researcher acted as the primary instrument. This study was conducted at Kalitapen 1 Elementary School in Banyumas Regency from June to October 2025/2026. The site was selected as a typical case representing inclusive education dynamics in the region.

**Table 1.** Research Design Overview Table

Aspect	Description
Subject	Classroom teachers, students with hearing and speech impairments and learning disabilities, and parents
Object and Focus	The holistic educational ecosystem, with a main focus on the classroom learning process involving students with special needs
Data sources	Primary: observations and interviews Secondary: school documents
Validity Technique	Source/ method triangulation, member check, and audit by a supervising lecturer
Analysis Method	Qualitative data analysis (collection, reduction and conclusion drawing)
Reporting Standard	Followed guidelines for reporting qualitative studies (Cheng et al., 2025)

Specifically, the case study method is applied to explore in depth the unique phenomena that occur in the inclusive education setting at Kalitapen 1 Elementary School. Kalitapen 1 Elementary School was chosen as the research location based on specific criteria and the local wisdom as a typical case that can representatively describe the dynamics and reality of inclusive education in the region.

The data collected in this study are qualitative, in the form of observation and interview results. The first technique is participatory observation to directly observe the application of a holistic approach in daily activities at Kalitapen 1 Elementary School. The second technique was in-depth interviews conducted with semi-structured interview guidelines to explore each research subject's understanding, practices, and challenges. Wei et al. defined the qualitative phase as data collection continued until thematic saturation (Wei et al., 2025). The following diagram illustrates the sequential and iterative stages of this qualitative case study.



**Figure 1.** Diagram Illustrates Qualitative

The research was conducted through five systematic phase: 1) in the preparation and entry phase, the research design was finalized and the researcher entered the field at Kalitapen 1 Elementary School to establish access and gain familiarity with the research context; 2) during the data collection phase, three techniques were implemented concurrently, namely participant observation of daily school activities, in-depth semi-structured interviews with teachers and parents, and document analysis of relevant school records to obtain comprehensive and contextual data; 3) data analysis was carried out continuously during and after collection through data reduction and thematic coding in an iterative cycle, allowing patterns and meanings to emerge progressively; 4) to ensure credibility, dependability, and confirmability, rigorous validation procedures were applied, including triangulation by cross-verifying findings across sources (teachers and parents) and methods (interviews and observations), member checking by returning interview summaries to participants for confirmation, and an audit process in which the supervising lecturer reviewed the entire research procedure and data trail; and 5) in the final phase, conclusions were drawn regarding the implementation of the holistic approach, and the study was reported according to qualitative research standards (Cheng et al., 2025) within a naturalistic paradigm focused on meaning (Hermawan & Hariyanto, 2022).

## Results and Discussion

### Result

Inclusion is the practice of educating all students, including those with severe and multiple disabilities, in regular schools that children typically attend without special needs. Inclusive education means that schools must accommodate all children regardless of their physical, intellectual, social, emotional, linguistic, or other conditions, including children with disabilities, gifted children, child labourers and street children, children in remote areas, children from ethnic and linguistic minorities, underprivileged children, and marginalized groups in society (UNESCO, 2006).

Inclusive schools combine regular classes and children with special needs. Through inclusive education, children with disabilities are educated together with other (normal) children, who are expected to optimize their potential. Children acquire all the competencies they need to express themselves and survive in society through education (Kencana et al., 2020). Character education has several key pillars that form the foundation for the development of moral values, ethics, and personality in students with special needs. Research findings show several aspects of independence and perseverance in students with dual special needs of speech and hearing impairment and slow learning through a holistic approach to inclusive education, as presented in the following infographic.

**Table 2.** Character Development of Independence and Perseverance SWD

Types of Students with Special Needs	Characteristic studies					
	Independence			Perseverance		
	Holistic approach					
	Cognitive	Affective	Psychomotor	Cognitive	Affective	Psychomotor
Deaf-mute	<ul style="list-style-type: none"> <li>• Decision making</li> <li>• Communication and self-expression</li> <li>• Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Initiative</li> <li>• Self confidence</li> <li>• Social responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Functional independence</li> <li>• Progresif</li> <li>• Social interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Remembering and establishing simple strategies</li> <li>• Showing anticipation of routines</li> </ul>	<ul style="list-style-type: none"> <li>• Self-regulation</li> <li>• Facial expressions that show</li> </ul>	<ul style="list-style-type: none"> <li>• Physical perseverance</li> <li>• Eye contact</li> </ul>
Slow learner	<ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Initiative</li> <li>• creative</li> <li>• Decision making</li> </ul>	<ul style="list-style-type: none"> <li>• Self confidence</li> <li>• Functional independence</li> </ul>	<ul style="list-style-type: none"> <li>• Independent learning</li> <li>• Self-discipline</li> <li>• Fulfillment of learning needs</li> </ul>	<ul style="list-style-type: none"> <li>• Metacognition</li> <li>• Setting goals</li> <li>• Reframing failure</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to manage frustration</li> <li>• Demonstrating passion</li> <li>• Ownership</li> </ul>	<ul style="list-style-type: none"> <li>• Consistency</li> <li>• Proactively seeking help</li> <li>• Focus on tasks</li> </ul>

According to data from the Central Statistics Agency (BPS) in 2023, the number of children with special needs in Indonesia reached 2.2 million, or 3.3% of the total number of children. This data is divided into various types of special needs that each child has. The character of students with special needs has several main pillars that form the foundation for the development of moral values, ethics, and personality. Two crucial character traits for students with special needs are independence and perseverance. Independence for students with special needs prioritizes helping them build self-esteem and minimize lifelong dependence. Meanwhile, perseverance is the driving force that enables independence and learning to be achieved so that students with special needs who are deaf, speech impaired, and slow learners do not give up easily.



**Figure 2.** Children with Slow Learners

Physically, students with special needs who are deaf and slow learners are no different from other regular students. The special characteristics of deaf students can be seen in their communication, while slow learners can be identified by their learning outcomes in class. Based on the interview results, special needs diagnoses are conducted by professionals such as psychologists and counsellors to provide students with special needs with more holistic services to develop essential life skills.

Deaf children face unique challenges in their learning and development processes. Their limited ability to understand spoken language can impact their reading and writing skills (Murwati & Syefriani, 2024), Therefore, special education is very important for deaf children because it provides a learning environment tailored to their needs. Individuals with sensory impairment (visual and/or hearing) experience health inequalities and an increased risk of medication-related iatrogenic disease compared with the general population (Cooper et al., 2023). Economic barriers are one of the reasons why children with dual hearing and speech impairments attend regular schools, as distance and time make it difficult for parents to send students with special needs to special schools.

**Discussion**

**Implementation of a Holistic Approach to Inclusive Education at Kalitapen 1 Elementary School  
1. Holistic Learning Strategies for Students with Dual Hearing and Speech Impairments**

Students with special needs who are deaf and slow learners require treatment that meets their essential abilities. Tunaganda is a term used in Indonesia to refer to individuals with multiple disabilities, meaning they have two or more types of disabilities (Primagraha & Keller, 2024). Meanwhile, slow learners are children who experience delays in learning, skill development, and understanding information they acquire (Rahayu & Nur, 2022). Based on the results of the study, the implementation of a holistic approach to inclusive education at Kalitapen 1 Elementary School was carried out through learning strategies for students with dual hearing and speech impairments and slow learners, integrating character, social, spiritual, and emotional aspects into learning and habits, as well as collaborating with parents and experts on the handling of students with special needs.

Learning for students with special needs requires a tailored strategy for each individual. The learning strategy for students with dual hearing and speech impairments at Kalitapen 1 Elementary School is implemented by classroom teachers due to the absence of special education teachers (GPK). Students with dual hearing and speech impairments experience obstacles in hearing and speaking caused by trauma during childhood. Children with multiple disabilities are caused by various factors, which can occur before the disorder, at birth, and/or after birth (Primagraha & Keller, 2024). Based on interviews with the parents of students with dual hearing and speech impairments, the children underwent speech therapy and had hearing aids fitted, but these were unsuccessful, so the parents stopped the therapy due to financial constraints.

Children with special needs often face difficulties in traditional education systems that are not designed to meet their specific needs. Standard curricula often do not take into account individual differences in learning speed, learning styles, and additional support needs (Nugroho et al., 2024). The absence of special schools (SLB) in the domicile area of SWD with dual hearing and speech impairments requires students to attend regular schools. To reach SLB, SWD parents have limited access due to a 25 km distance from their domicile and the absence of adequate public transportation. Limited facilities and infrastructure to support special needs are also one of the challenges in handling SWD with dual hearing and speech impairments.

In line with research by Atma, it shows that teaching style and learning motivation have a significant, positive relationship with learning achievement (Atma et al., 2021). Teachers' skills and the use of technology in individual services for students with special needs, including those with dual hearing and speech impairments and those with learning disabilities, contribute to the fulfilment of students' essential abilities. Research by Adhiambo (2025) on the contribution of symbols to language skills for students with hearing impairments suggests incorporating symbol-based communication tools into the curriculum in special education settings to enhance language development and communication skills (Adhiambo et al., 2025).

**Table 3.** Results of Observation, Identification, and Assessment of Children with Multiple Disabilities

Aspect Assessed	Description	Yes	Sometimes	No
Pointing to desired objects	Child uses her finger to point at objects		√	
Looking at the person she is talking to	Child makes eye contact during interactions	√		
Shaking or nodding her head to answer	Using head gestures to respond	√		
Holding out objects to ask for help	Showing request through actions		√	
Imitating other's people movements	Child performs motor imitation			√
Conveying emotions through facial expressions	Facial expression show emotions			√
Using symbol or pictures for communication	Child uses a communications board or PCES			√

Aspect Assessed	Description	Yes	Sometimes	No
Responding to other people's gestures	Responding to other peoples' movement a relevant manner	√		

Ideally, an inclusive school has special guidance teachers, supporting facilities and equipment according to the students' disabilities, and psychologists or therapists. However, budget constraints and the lack of inclusive funding mean that regular schools must accept students with various disabilities in accordance with the law. The learning strategies used are the same as those for regular students, but teachers modify the curriculum by adjusting learning outcomes, lowering the criteria for learning objectives, and using non-binding assessments. Teachers do not create individual learning programs (PPI) due to time constraints and insufficient knowledge about students with dual hearing and speech impairments. Therefore, the applied prompt method is limited to physical prompts, such as full or partial physical assistance in carrying out tasks. Physical prompts involve physical contact between individuals. This type of prompt is usually used when other prompts cannot provide sufficient information for the child to carry out the task, or when the child is not yet capable of performing the task (Kamil et al., 2023).

Develop multiple intelligences to equip themselves to plan learning and solve problems in the future. Therefore, for inclusive school teachers, essential skills such as professional and pedagogical skills need to be balanced with skills for working with children with special needs. Teachers' teaching style and the motivation they instil in the learning process determine the extent to which students can develop their essential abilities. Curriculum modification is necessary so that children with special needs can fully participate in learning, develop functional skills, build independence and self-confidence, and prepare for life transitions. "Children with needs deviate from the average normal child as seen by their physical, mental, sensory, and neuromuscular characteristics, social and emotional behavior, ability to communicate, or a combination of two or more of the above causes the child to need modification" (Thaibah & Arsyad, 2023).

## 2. Holistic Learning Strategies for Slow Learners with Learning Disabilities

The Individual Learning Program (PPI) is a learning program designed and developed based on the results of an assessment of each child's abilities, which are recorded in a child's profile (Directorate of Special Schools, 2018). The PPI forms the basis for addressing the learning and developmental needs of children with learning disabilities in inclusive classrooms. Based on the study's results, the learning strategies for slow learners did not differ from those for regular students. This was based on interviews with parents, which found that assessments by psychologists led to diagnoses of intellectual disorders with low IQs, categorized as slow learners, and that these children did not have significant obstacles in affective or psychomotor skills.

The learning strategy was implemented by adding extra class hours to help students catch up in class. Repeated and intensive treatment helped slow learners understand the material. Currently, classroom teachers prioritize how slowly learners read, write, and count as the foundation for their future lives and the basis for children's cognitive abilities. Slow learners need more time to understand the material in class (Devi et al., 2022). Therefore, teachers implement peer tutoring as part of the social development of slow learners. This is intended to help regular students support slow learners in meeting their cognitive development needs that teachers cannot address due to time constraints and the large number of students in the classroom. The role of peers can positively or negatively affect the discipline of students with special needs. Peers who provide support and understanding can increase students with special needs' motivation to maintain discipline (Ulya et al., 2024).

Students with special needs who are slow learners need full support in reading, writing, and arithmetic. Fatonah et al. (2025) conducted a data analysis of research on reading ability levels among students, showing that most face challenges in accurately identifying and understanding words. The implications of this research emphasize the need to develop appropriate teaching strategies to help students overcome their reading difficulties. Research reveals that conventional teaching methods are often ineffective in engaging students with learning difficulties. These findings emphasize the importance of implementing appropriate collaborative learning strategies as a more effective alternative approach (Gal & Ryder, 2025). The conducive nature of the learning environment determines the success of slow learners. Research shows that to create a supportive physical preschool environment for

slow learners, it is necessary to emphasize sensory comfort (light, temperature, sound), spatial layout, facility quality, and safety aspects as crucial factors. These findings serve as guidelines for designers, organizers, and policymakers in providing appropriate educational facilities (Ahmad et al., 2015).

Learning assessments are tailored to the characteristics of their intellectual abilities, with teachers tending to give easy assessments with modified completion criteria. Slow learners are given their own completion targets so that teachers can assess how far they have progressed. However, the learning outcome reports (report cards) and learning media provided are the same as those for regular students. In accordance with Permendiknas 70 of 2009 on inclusive education, teachers should adjust the material and, as much as possible, provide examples using objects or conditions appropriate to students' circumstances (Devi et al., 2022). This is due to the lack of specialised learning materials for students with special needs and guidance on how classroom teachers should manage inclusive schools, which makes it difficult for teachers to put this into practice in the field.

Field evidence shows that teachers' skills in using learning media are not matched by the availability of media that suits the learning needs of children with special needs. Although AI and AR are now widely used, their implications are still lacking. Augmented reality and artificial intelligence are promising features in all aspects. Research showed that AI-based interfaces significantly increased autonomy, academic engagement, and content accessibility promoting inclusive education for students with visual, physical, and cognitive disabilities (Kooli & Chakraoui, 2025). Moreover, a study by Mansouri (2025) showed that combining auditory attention training with tDCS can improve speech perception in noise in children with hearing loss, with the combined method resulting in greater stability improvements than tDCS alone (Mansouri et al., 2025).

Ariffudin (2024) developed a metaverse-based Virtual Reality Counseling (VRC) medium for psychological services for students with special needs ((Ariffudin et al., 2024). This medium is an effective innovative counselling tool that leverages metaverse technology to create an immersive, interactive counselling experience, opening up opportunities for more inclusive, adaptive psychological services. Research findings indicate that effective teacher development must systematically integrate knowledge of technology, pedagogy, and content to build digital independence, enabling the education system to create an inclusive digital learning environment (Shi et al., 2025). The technological era requires teachers to be innovative. Obstacles in learning are expected to be minimized through technological modifications. Learning challenges such as low student interest, lack of teaching aids, irrelevant teaching materials, limited representation, and difficulties for teachers in explaining concepts are indicators that learning objectives are not being fully achieved (Munawar et al., 2025)

### **3. Integration of Character, Social, Spiritual and Emotional Aspects**

The integration of the character, social, spiritual, and emotional aspects of students with special needs who are deaf and slow learners into regular schools is carried out through habituation, in collaboration with parents using a communication book, and through multidisciplinary synergy. To address character aspects, classroom teachers with slow learners and deaf-mute students implement habituation in the classroom by instilling positive character traits, which are practiced continuously, primarily independence and perseverance, which are useful for the future and independent living. The social aspect concerns the ability to live in society and is realised through synergy with parents. They become key partners in supervision, which is carried out through active communication about the obstacles SWD face in developing their social skills. Positive character traits are instilled so that they become routine.

Character education is one of the life developments that help humans become sensitive to themselves and their environment (Rachmadyanti et al., 2024). Character needs to be instilled in every special needs and regular student in inclusive schools so that they have positive morals that will serve them well in the next stages of learning. Families play a key role in education by instilling norms and affection from an early age. Meanwhile, schools provide formal, structured education, and communities complement the formation of citizens through social values. Research has found that the transformation of education based on Ki Hajar Dewantara's philosophy within the framework of an independent curriculum has a constructive impact on student character building (Wijayanti et al., 2025). Values such as mutual cooperation, independence, nationalism, and appreciation of diversity can be effectively internalized through learning practices. Key concepts such as collaboration, learning autonomy, national

pride, and appreciation for diversity were successfully realized in learning activities. As a result, students showed increased engagement, intrinsic motivation, and strengthened ethical values and social skills.

The spiritual aspect is applied through collaboration with religious teachers, while the emotional aspect requires assistance from professional services, such as psychologists and therapists, to analyse the characteristics of SWD and determine what emotional development remains within reasonable limits. Children who experience emotional disorders will become children who exhibit immature behavior and tend to withdraw or isolate themselves from their surroundings (Faizah et al., 2024.). The purpose of synergising with parents and professionals is to understand the learning, emotional, and psychomotor needs of SWD, as part of a holistic approach to inclusive education.

## **Character Building for Students with Special Needs**

### **1. Character Values of Independence and Perseverance for the Deaf and Speech Impaired**

Independence is a key character trait that needs to be nurtured in children with special needs (ABK), which can be developed through inclusive education in regular schools or special education in special needs schools (SLB) (Hapsara, 2019). It is important for students with special needs to develop this character trait so that they can adapt and live independently in society. In fulfilling the character of independence in holistic cognitive aspects, classroom teachers determine the priorities of independence in accordance with the indicators of independence, namely decision-making skills, communication and self-expression, and problem-solving. In school-based learning, it is necessary to determine the learning methods and communication patterns used to address the learning difficulties of children with special needs who are speech-impaired, especially in non-inclusive regular elementary schools (Fitri & Abduh, 2024).

Research by Pratiwi et al. (2025) shows that the use of interactive multimedia influences students' sense of responsibility. Responsibility is one of the characteristics of independence in the holistic approach to the affective indicators of students with dual hearing and speech impairments. However, the limitations of learning media suitable for their impairments mean that teachers can only rely on simple multimedia with the help of physical prompts. Another study by Abdillah found that educational games such as GOPEKA have a significant impact on the learning of students with disabilities. Field tests with 82 students with disabilities show that gamification media can significantly improve self-understanding and career prospects, as evidenced by the difference between pre-test and post-test results, as analysed statistically (Abdillah et al., 2024). This reinforces the position of gamification as a medium that is not only enjoyable but also effective and inclusive in creating a more meaningful and accessible learning experience for all students.

The implementation of independence in cognitive aspects for students with dual hearing and speech impairments is carried out using a manual method, namely command gestures. Communication is one of the cognitive aspects in a holistic approach to inclusive education. Students with special needs (SWD) who are deaf and speech-impaired at Kalitapen 1 Elementary School use self-expression to understand their conversation partners, such as teachers and classmates. In the context of decision-making, teachers provide options by pointing because both the classroom teacher and students who are deaf and speech-impaired cannot use sign language, which makes active communication between the two difficult. To communicate, speech-impaired individuals often use various alternative communication techniques or tools, such as sign language, communication boards with pictures or letters, electronic communication aids, or special communication applications on mobile devices or computers (Fitri & Abduh, 2024).

Problem-solving, as one indicator of independence for deaf-mute children, plays an essential role in ensuring that these children can live independently as adults, without being accompanied by caregivers or providers. Independence is a habit and mindset of not relying on others, so students are expected to have the skills to be independent and reduce their dependence on others (Hapsara, 2019). In terms of problem-solving, children with dual sensory impairments (hearing and speech) have not yet demonstrated courage and tend to imitate how others interact. Children's independence is a key factor in their development. Independent children tend to have high self-confidence, problem-solving abilities, and better social skills (Nugroho et al., 2024).

The character traits of independence in students with dual sensory impairment (hearing and speech) that are implemented holistically in the affective or attitudinal aspects include initiative, self-confidence, and social responsibility. These three factors are interrelated with students' ability to

socialise in the wider community. The cultivation of independence in SWD with dual hearing and speech impairments by classroom teachers is carried out through practical methods: SWD with dual hearing and speech impairments are given tasks with simple instructions, using hand movements (non-BISI gestures), and then given time to complete them. For example, in art class, the subject matter is expressive drawing. The teacher displays expressive drawings on a projector, and then the SWD with dual hearing and speech impairments imitates them, which builds their confidence in their own work. The teacher sets a time limit by pointing to the long and short hands of the clock to indicate that time is up. Through these activities, they develop a sense of responsibility and initiative to complete the task immediately.

Psychomotor aspects are among the factors that determine whether SWD with dual hearing and speech impairments are able to complete their developmental tasks, including physical abilities and overall health. Indicators of independence in psychomotor aspects, such as functional independence, progressiveness, and social interaction, serve as references for classroom teachers in developing independence. The instilling and development of independence in psychomotor aspects for SWD with dual hearing and speech impairments is carried out by teachers through the habituation method. Teachers are accustomed to encouraging SWD with dual hearing and speech impairments to communicate, even though they do not have sign language skills, but they try to actively interact. The habituation method, which involves repetition, consistency, and positive reinforcement, has been widely applied across educational and therapeutic contexts for children with special needs (Nugroho et al.). Thus, gradually, there has been an increase in independence for SWD with dual hearing and speech impairments.

The perseverance of students with dual hearing and speech impairments in cognitive tasks shows indicators of anticipation of routines, which, for SWD, are crucial for structure and predictability because consistent routines reduce anxiety, confusion, and conflict, as students know what is expected of them. This is expected to prevent students with special needs from feeling frustrated and experiencing academic burnout. Academic burnout among elementary school students is important to note because this is the stage when academic experiences are formed (Wangid & Purwanti, 2020). For slow learners, the ability to manage frustration due to school burnout is also an indicator of perseverance in the holistic approach to inclusive education in affective indicators. Therefore, the appropriate learning treatment for slow learners will determine how self-regulation is applied in their learning environment.

Based on interviews with parents and classroom teachers, children with dual sensory impairments who received simple treatment and habituation showed progress in independence. In daily activities of independent children with dual sensory impairments, communication is essential for conveying messages and is an important part of the learning process in Activities of Daily Living (Primagraha & Keller, 2024). Therefore, it can be concluded that the character of independence in cognitive, affective, and psychomotor aspects improves over time through the prompt method in the form of physical prompts, the delivery of information through simple gestures, and collaboration with parents to improve the character of independence.

Self-regulation and social-emotional learning are critical for students with dual sensory impairments, as these skills serve as a bridge to access learning and social interaction and help compensate for communication barriers. Therefore, their development requires cooperation from all aspects, including teachers, parents, and the community. The implementation of the Social and Emotional Learning (SEL) approach in the classroom is designed by the class teacher, such as discussions, morning sharing, giving affection stars, appreciation, class agreements, group work, circle time, and reflection, while learning activities outside the classroom are integrated into the agenda or school habituation program (Lestari & Azizah, 2023). In addition, self-regulation can be applied through learning games, as shown in Primaestri's research, which indicates that one alternative way to introduce and teach self-regulation skills is through games (Primaestri et al., 2023).

Perseverance is closely related to independence. Perseverance is not only about the physical (psychomotor) but is also influenced by mindset (cognitive) and feelings (affective). Learning in regular classes for children with dual disabilities refers to how they can process limited information and their beliefs about learning and challenges. Indicators of the cognitive aspect that teachers strive for to develop independence include remembering and establishing simple strategies and showing anticipation of routines.

Based on the results of observations, teachers did not provide much guidance in establishing simple strategies. This was because, in learning activities with students with dual sensory impairments,

teachers tended to structure activities so that students could follow instructions. Miscommunication was common due to limited communication skills. As a result, teachers often used books or pointing to convey their intentions and objectives. For children with special needs, developing perseverance is crucial because they have specific needs that require the right approach and support to reach their full potential in social, emotional, and academic life.

Self-regulation and facial expressions of determination were not observed during the observation and did not appear during teacher interviews. The parents' opinion confirmed that SWD with dual deafness and speech impairment were less expressive, making it difficult for teachers and parents to understand their feelings from their facial expressions. Attitudes (affective) that are not visible are difficult to learn in SWD with dual hearing and speech impairments because the instructions and commands they can receive are limited. In a holistic approach to inclusive education, the psychomotor aspect, physical perseverance, and eye contact are often overlooked.

In a regular class, teachers teach 29 students with diverse needs, so teachers often make little eye contact. However, physical perseverance is often shown by students with dual hearing and speech impairments when doing assignments. Even though they do not understand the meaning of the writing due to their limitations in reading and writing, students with dual hearing and speech impairments are always enthusiastic about writing. In light of these conditions, the classroom teacher prioritises helping SWD realise that what they are doing is based on their own interests and motivation, thereby developing self-awareness. Self-awareness affects resilience, meaning that the higher an individual's self-awareness, the greater their resilience (Ariyani et al., 2025).

## **2. Character Values of Independence and Perseverance of Slow Learners**

The development of independent character in a holistic, inclusive education approach that addresses cognitive aspects for slow learners is one of the main indicators of concern for students in the classroom. Based on the study's results, slow learners experience problems from the womb, leading to brain dysfunction. This makes it difficult for them to solve problems, think creatively, and make decisions. The development of independence and perseverance in cognitive skills, based on classroom teacher interviews, was carried out through self-development services. These services were provided to minimise the sociological impact of the inability of slow learners to participate in classroom activities. The sociological impact arises from their relationships with groups or individuals around them (Oktaviani, 2019). In study groups, slow learners often contribute less than their peers, creating gaps and triggering conflicts. Based on this, teachers strive to instil independence so that students can develop problem-solving skills. A child's independence in facing life's challenges must be fostered as early as possible. In developing independence, each child needs help in accepting themselves, their strengths, and their weaknesses (Oktaviani, 2019).

The self-development services provided not only impact independence but also perseverance, enabling slow learners to engage in metacognition, set learning goals, and reframe failure. Based on observations, researchers found that slow learners are more open about expressing their failures. This is because, physically and socially, slow learners do not appear to differ from other regular students. Findings from interviews with parents show that slow learners underwent therapy to develop their cognitive abilities, and parents' concerns about their slow intellectual abilities in learning led to consultations with psychologists.

Emotions are a core driver of children's moral behavior, as they create awareness of the consequences of their actions. However, not all children—such as slow learners—can effectively regulate these emotions. The level of slow learners' attachment security was affected by school counselors' affection, responsiveness, sensitivity, and availability, both physically and emotionally (Nugraini et al., 2024). Facts from the research site indicate that the absence of counsellors and special guidance teachers in inclusive schools results in services that are less than optimal.

Self-confidence in the character of independence in the affective aspect of the holistic approach to slow learners is a powerful therapeutic strategy for restoring and building self-esteem, which is the foundation for the holistic development of slow learners. Research by Trisnani reinforces this. This study shows that play therapy with wayang is beneficial in improving the self-esteem of slow learners as evidenced by the shift from the low category to the medium category during the eight treatment sessions conducted (Trisnani et al., 2024).

Behavioural therapy is one of the efforts in self-development services. The main thing to note and do in a behavioural approach is to filter and separate problematic behaviours, and to limit the desired changes specifically (Oktaviani, 2019). Thus, classroom teachers continue the treatment carried out by therapists in coordination and cooperation with parents. In the development of independence, the family plays a very important role. Classroom teachers regularly communicate with parents regarding the development of independence and perseverance in slow learners. This is because the family is the first environment in which children are raised, from childhood to adolescence to adulthood (Hudiyah et al., 2023).

The affective aspect in the development of independent character includes indicators of self-confidence, initiative, and emotional independence. In this case, teachers develop self-confidence and emotional independence by forming proactive, heterogeneous learning groups to address attitudinal needs in line with the norms that apply to slow learners. Through these learning groups, slow learners can interact with their peers and develop self-confidence and independence.

The affective aspect of the holistic, inclusive approach to perseverance includes indicators of the ability to manage frustration and to show passion. Through subject lessons, teachers explore the potential of slow learners. This is intended so that they can recognise and be proud of themselves as the foundation of self-awareness. Based on the interview results, the classroom teacher first conducts an assessment to find out the passions and skills of slow learners. In this case, the classroom teacher is assisted by parents, who serve as synergistic partners who know the ins and outs of slow learners at home, and by therapists. The findings show that the skills possessed by a slow learner will provide them with life skills for the future (Miftakhi et al., 2020)

The psychomotor aspect emphasises how slowly learners can learn independently, exercise self-discipline, and meet their learning needs. Meanwhile, in terms of perseverance, consistency and persistence are among the efforts to help slow learners fulfil the developmental aspects of their stage. Independence and perseverance in the psychomotor aspect for slow learners are developed through project-based learning activities. Teachers know that slow learners have difficulty meeting learning requirements, but project-based learning can be an option for character building. Character-building activities can increase the self-confidence of children with special needs (ABK), enabling them to recognise their potential. The level of independence and perseverance that children have will affect their future lives. Children's independence will increase gradually in line with their needs.

### **3. Supporting factors and hindering character building**

The holistic development of independence and perseverance in inclusive education has supporting factors that contribute to the program's success and inhibiting factors that require continuous evaluation. Support during character development for children with hearing and speech impairments or learning disabilities includes active parental involvement and synergy, which contribute to the program's success. Another form of support is parents who have knowledge about their child's condition and are open-minded about what their child is experiencing. Parents' efforts to develop essential abilities in children through therapy also help classroom teachers handle SWD more effectively. Although in reality, parents are unable to send their children to special schools (SLBs) due to distance and cost, their proactivity helps teachers by guiding the treatment being implemented.

The problems experienced were accessibility, infrastructure availability, understanding of deaf and autistic culture, and career problems (Kurniastuti, 2025). In addition to individual services, career services are important for shaping students with disabilities. Systematic synergy between career guidance services and the formulation of inclusive education policies underscores the importance of a collaborative approach as the foundation for comprehensive support for students with disabilities (Eseadi & Ogbuabor, 2023). Research findings indicate that discriminatory experiences experienced by deaf and hearing-impaired students are associated with relatively low feelings of security and high social avoidance, which can cause students to lose their jobs. (Guan et al., 2023)

For students with dual hearing and speech impairments, hearing difficulties are among the barriers to communication, compounded by the inability of SWD and by the lack of teacher competence in sign language. Specifically, hearing loss can affect communication with others (Tsitah & Fitria, 2021). Another obstacle is the lack of hearing aids because children feel uncomfortable wearing them. Meanwhile, slow learners face intellectual barriers that make it difficult for them to regulate themselves and their emotions.

Difficulties in sign language are an obstacle for students with dual hearing and speech impairments. On the other hand, the findings also provide insights into how members of the Deaf community experience linguacultural contact between signed and spoken/written languages (Nicodemus et al., 2021). The main essential skill for them is living independently and having the skills they need for adulthood. Deaf adolescents face heightened vulnerability due to unique challenges, including communication barriers and social exclusion (Zeng et al., 2025). The inability of children with dual sensory impairments to integrate into society raises concerns about bullying and difficulties in socializing. Bullying has become a global concern. It becomes even more pertinent for students with special education needs (SWSEN), particularly in resource-constrained countries (Irshad & Amjad, 2026). Hearing loss due to presbycusis is a multifactorial sensorineural disorder. It is often associated with speech discrimination difficulties. In many cases, sensory impairments can be corrected with hearing or visual aids, making them an attractive target for improving quality of life (Bouscaren et al., 2019).

Self-regulation is a core component and specific skill developed within the framework of social-emotional learning. Research by Purwoko (2024) shows that self-regulated learning (SRL) training, in conjunction with counselling, is an effective intervention for enhancing social skills and independence in students with impairments (Sartinah et al., 2024). This finding enriches the landscape of inclusive education. This approach not only addresses social issues in the classroom, but also actively builds a positive learning environment that embraces all children. Self-regulation is a personal foundation that is built through a broader social-emotional process. In addition, in the context of inclusive education, teachers often have difficulty in recognizing the characteristics of students with social-emotional disabilities due to a lack of understanding and adequate instruments (Minsih et al., 2025).

Teachers' limited knowledge due to the absence of GPK and inclusive facilities and infrastructure in schools also has a significant impact. Classroom teachers are unable to facilitate SWD development. The lack of government funding also prevents schools from implementing inclusive education as effectively as possible. The curriculum applied is also limited to the national curriculum rather than an inclusive curriculum. Therefore, professionals and stakeholders need to work together to support the implementation of learning for SWDs in regular schools.

### **Conclusion**

The implementation of holistic education is crucial for students with special needs (SWD) and can be instilled through habit formation and the creation of a supportive environment. Various obstacles and challenges hinder the achievement of SWD character development. It is hoped that, in the future, the government will proactively collect data on the conditions of students with special needs in the field and address the problems that arise, so that students' learning opportunities can be properly facilitated.

Based on the results of the study, it can be concluded that character building for students with special needs who are deaf and slow learners is carried out holistically by integrating character, social, spiritual, and emotional aspects into learning and habits, as well as collaborating with parents and experts regarding the handling of students with special needs. Classroom teachers implement learning strategies for students with special needs because there are no special education teachers. For students with dual sensory impairments (hearing and speech), teachers modify the curriculum by adjusting learning outcomes, lowering the criteria for learning objectives, and using non-binding assessments.

The prompt method applied is limited to physical prompts in the form of full physical assistance. Meanwhile, for slow learners, additional teaching hours are provided to give intensive treatment on the main aspects, namely reading, writing, and arithmetic skills. Teachers conduct their own assessments but do not create individual learning programs and do not have special learning media due to limited competencies. The integration of character, social, spiritual, and emotional aspects is carried out through habituation, cooperation using liaison books, and multidisciplinary synergy with the help of religious teachers and other classroom teachers.

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