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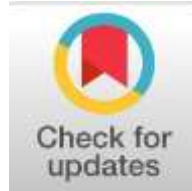
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Innovation of Integrated Pedagogical Interventions to Enhance Adaptive Skills of Grade VI Students with Intellectual Disabilities in Inclusive Schools

Inovasi Intervensi Pedagogis Terintegrasi untuk Meningkatkan Keterampilan Adaptif Siswa Tunagrahita Kelas VI di Sekolah Inklusi

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Abstract

General Background Inclusive education aims to provide equitable, responsive instructional environments for all learners, which requires flexible strategies to manage classroom diversity. **Specific Background** Upper elementary students with intellectual disabilities often struggle to meet abstract cognitive demands and demonstrate poor adaptive autonomy without continuous structured support. **Knowledge Gap** Current literature predominantly focuses on early elementary interventions, leaving a critical gap regarding how integrated pedagogical supports function for older students transitioning to more complex instructional expectations in rural inclusive settings. **Aims** This study investigates the application and adaptive outcomes of an integrated pedagogical intervention for a sixth-grade student with intellectual disabilities. **Results** Through a qualitative case study utilizing observational and interview data, the findings demonstrated that combining concrete media, individualized scaffolding, repeated instruction, and active parental partnerships generated significant behavioral improvements. The student progressed from heavy reliance on teacher prompting to demonstrating enhanced attentional stability, independent task completion, and active peer interactions. **Novelty** This research uniquely operationalizes a holistic intervention framework that merges classroom-based cognitive scaffolding with continuous family synchronization to target both academic and adaptive skill deficits simultaneously in older children. **Implications** Deploying comprehensive, data-driven interventions provides educators with a sustainable strategy to decrease learner dependency and cultivate functional autonomy within diverse general education classrooms.

Highlights

- Combining concrete manipulatives with repeated instruction successfully bypassed cognitive processing delays in an upper elementary learner.
- The integrated intervention significantly advanced the student's attentional stability and independent task completion capabilities.
- Consistent strategic partnerships with parents ensured the successful transfer and reinforcement of adaptive skills across learning environments.

Keywords

Integrated Pedagogy; Intellectual Disabilities; Adaptive Independence; Inclusive Classrooms; Special Education

INTRODUCTION

Education is a process of development of whole potential of the learners so that they acquire spiritual values, self-regulation, personal character, intellectual competence, moral integrity and skills of personal, social, national and civic life. This principle stresses that all learners, including learners with special educational needs, have the right to quality education that is responsive to their individual characteristics and learning needs. Here, the practical applications of the right to education are special education and inclusive education. Through adaptive learner-centered instructional practices, these applications provide educational services for learners with physical, emotional, mental, intellectual, or social disabilities (Musyarrofah, 2024). The implementation of inclusive education in elementary schools has resulted in a more diverse student profile in regular classes. Teachers are expected to provide instructional content and to develop flexible learning strategies that ensure equitable learning opportunities for all students. This task becomes even more complex when the classroom contains students with intellectual disabilities, which is defined as significant limitations in both intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills, which affect a child's ability to reason, problem solve, communicate, and adjust to the demands of everyday living. These limitations often lead to slower conceptual understanding, difficulty following complex instructions, and lower levels of independent learning when compared to typically developing peers.

These problems are more apparent in the upper elementary grades. In contrast to the lower elementary grades, where instruction is primarily focused on concrete learning experiences, sixth-grade learning requires students to use abstract thinking, logical reasoning, problem-solving, and the integration of concepts across subject areas. Students with intellectual disability often have difficulty with the academic demands due to poor development of cognitive and adaptive skills. These students, without adequate educational support, are at a higher risk of experiencing learning challenges, decreased classroom engagement, and growing gaps in academic performance. The success of instruction of students with intellectual disabilities relies on the modification of curriculum but also on the teachers' ability to manage learning in a comprehensive way. Teachers are expected to maintain the classroom, differentiate curriculum, provide individualized instruction, utilize instructional scaffolding, provide positive behavior support, and to continuously assess students based on their development. According to Hermanto and Pamungkas (2025), the success of inclusive education heavily depends on the competencies of teachers in managing learning, managing student behavior, and consistently evaluating educational services. Thus, it is critical to adopt an instructional approach that systematically combines multiple pedagogical supports to better address students' diverse learning needs.

Previous studies have proven that students with intellectual disabilities have difficulties not only in academic achievement but also in social skills, communication, adaptive behavior, and environmental adjustments. Such needs require more structured and individualized educational services than are usually provided to students in regular classrooms. Children with intellectual disabilities are more likely to have lower academic performance and more difficulties with social interaction and school adjustment than their peers without disabilities (Normawati et al., 2024). Therefore, educational interventions are needed to optimize the academic development and adaptive functioning by trying to meet the individual learning needs through systematic and continuous support (Purwandari, 2024). One pedagogical approach that addresses these needs is the integrated pedagogical intervention. Integrated pedagogical intervention is a complex of teaching and learning, in which several educational strategies are integrated systematically and coordinately. These include curriculum adaptation, instructional modification, individual guidance, positive reinforcement of behavior, cooperation with the learning environment and continuous assessment according to the specific needs of students. This method aims to improve not just academic performance but also adaptive skills, independence, and engagement in classroom learning (Maria & Spyridoula, 2025). This integrative approach better prepares teachers to create inclusive learning environments and to provide educational support consistent with the characteristics of students with intellectual disabilities.

The condition is reflected at SDN 006 Muara Bengkal. One student has been identified as having an intellectual disability and demonstrates academic and adaptive development that is different from classmates. The total number of sixth graders is 27. As the classroom teacher you will face many challenges in the process of teaching this student. Some of the challenges include simplifying instructional materials, providing more concrete and sequential instructions, providing consistent individualized support, and managing classroom activities to ensure effective learning for all students. These conditions show that effective instruction needs more than curriculum alteration but demands integrated, systematic, and continuous pedagogical interventions. Many studies have investigated educational interventions for students with intellectual disabilities, but most of these studies have been conducted in special education settings or in the lower grades of elementary schools. However, there is limited research that specifically investigates the implementation of integrated pedagogical interventions for upper elementary students, specifically sixth graders in inclusive schools. Moreover, studies in rural elementary schools like SDN 006 Muara Bengkal are still limited, even though the educational resources, facilities, and inclusive support services in rural areas are very different from those in urban schools. The gap indicates the need for more research on the practices of pedagogical intervention that are appropriate for inclusive elementary schools in rural locations.

Based on these considerations, this study aims to describe the implementation of integrated pedagogical intervention for a sixth grade student with intellectual disability at SDN 006 Muara Bengkal. The outcomes are anticipated to furnish empirical proof regarding adaptive instructional practices in inclusive education, and to offer practical guidance for teachers, schools, and policy makers in formulating more effective educational strategies for students with intellectual disabilities, particularly within upper elementary classrooms.

METHOD

This research used a qualitative research method with a case study research design to study the implementation of an integrated pedagogical intervention for a sixth-grade student with an intellectual disability at SDN 006 Muara Bengkal. A qualitative case study was chosen because it allows for an in-depth understanding of educational practices, participants experiences and the natural context where the intervention was implemented. This approach is suitable for the study of complex pedagogical processes and the interactions between teachers, students and the learning environment. The research was conducted in April - May 2026 at SDN 006 Muara Bengkal. Data were collected from primary and secondary sources. The primary data were collected by means of classroom observations and semi-structured interviews, and the secondary data were collected from school documents, students' development records, lesson plans and supporting documents. Participants were purposively selected based on their involvement in the intervention. Participants included the sixth grade classroom teacher, the school principal, a sixth grade student with an intellectual disability, the focal participant, and the student's parent.

Data were collected through non-participant observations of classrooms and semi-structured interviews. Classroom observations assessed the student's learning behaviors, adaptive skills, responses to instructional activities, teacher-student interactions, and the use of integrated pedagogical strategies in real classroom contexts. Detailed information on the instructional planning, implementation procedures, challenges faced, types of educational supports, and perceived changes in the student's academic and adaptive performance was gathered from the classroom teacher, school principal, and the student's parent through semi-structured interviews. The researcher was the main research instrument in qualitative research. The researcher was supported by observation and interview guidelines to make the data collection systematic and comprehensive. The study used method triangulation, persistent observation and member checking to establish the credibility of the findings. Triangulation was achieved by comparing data derived from observations and interviews, and prolonged observation allowed the researcher to examine the consistency of behaviors and instructional practices of participants over time. To enhance the credibility and accuracy of the collected data, member checking was performed by verifying the research findings with the classroom teacher and other relevant participants. The interactive model of qualitative data analysis, which consists of three interrelated stages, namely data reduction, data display, and conclusion drawing and verification, was used to analyze the data. For data reduction, information from observations, interviews and documentation was ordered and grouped according to emerging themes such as students' learning needs, pedagogical intervention strategies, learning responses and behavioural changes. The organized data were then described to identify patterns and relationships, and verified through triangulation and member checking to establish the credibility of the findings.

RESULT AND DISCUSSION

The study was conducted at SDN 006 Muara Bengkal, located in Muara Bengkal District, East Kutai Regency, East Kalimantan Province, a school that offers educational services to students with diverse characteristics and learning needs, including students with special educational needs in an inclusive education setting. The study focused on a sixth grade student with the initials Dv who was identified as having an intellectual disability. Based on initial classroom observations and information received from the classroom teacher, Dv struggled to understand abstract learning materials, required additional time to complete academic tasks, and needed repeated instructions plus concrete examples to be able to participate effectively in classroom learning. In addition to academic difficulties, Dv had problems with adaptive behavior, such as independent learning, following classroom rules, and peer interaction, but the student was able to engage in classroom activities with proper guidance and individualized assistance. These conditions led the classroom teacher to implement an integrated pedagogical intervention to address the learning needs of the student through systematic instructional adaptations. The key informant was the classroom teacher in the sixth grade while the secondary informants were the school principal, the student's parent, and Dv to get a complete understanding of the intervention. Their participation yielded information about the student's learning needs, the type of pedagogical intervention used, and the student's academic and adaptive progress during the instructional process.

Implementation of the Integrated Pedagogical Intervention

The implementation of the integrated pedagogical intervention was carried out in the sixth grade classroom of SDN 006 Muara Bengkal from April to May 2026. The intervention was aimed at a student with an intellectual disability, identified by the initials Dv, and it was characterized by the implementation of instructional adaptations, individualized assistance, the use of concrete learning media, positive reinforcement, repeated instruction and continuous monitoring throughout the learning process. Instead of being implemented as a separate remedial program, these strategies were integrated into daily classroom instruction allowing the student to participate alongside peers within the inclusive classroom setting. Classroom observations revealed that the initial use of the intervention was characterized by intense teacher support. In the first observation, Dv showed a limited attention to the classroom instruction and was easily distracted by the activities around the classroom. The student could only follow simple instructions and needed the explanation two to three times before understanding the assigned tasks. Classroom participation was relatively passive, and most learning activities could only be completed after the teacher's direct guidance. The teacher used concrete instructional materials such as pictures and real objects and provided individualized explanations in simple and easy to understand language to make it easier to understand. Social interaction was also limited, with Dv interacting mainly with the student sitting next to him.

In the second observation a significant improvement was noted. Dv could sustain attention for longer periods of time, follow simple instructions with fewer repetitions and complete most learning tasks with little teacher assistance. There was also an improvement in classroom engagement as the student was willing to answer simple questions and participate in learning activities. At this point the teacher used instructional aids of picture cards and concrete teaching aids to assist the

conceptual understanding of the students. Individualized assistance was provided, but the intensity of that assistance was reduced as the student became more independent. Social participation also improved with Dv starting to participate in simple group discussions with classmates. The third observation showed the highest improvement during the intervention period. Throughout the learning session, Dv was attentive, followed most of the classroom instructions on his own, and completed assigned tasks with much less teacher support. The student showed increased confidence by participating more in class discussions and communicating more often with the teacher. Furthermore, the social interaction was not limited to the seat partner, as Dv interacted actively with several classmates during the collaborative learning activities. Concrete learning media were still used but individualized assistance was only given when necessary, showing increased learning independence and adaptive functioning.

Comparisons across the three observation sessions revealed consistent improvement in multiple dimensions of learning behavior. Dv initially showed low concentration, repeated instructions, high dependence on teacher assistance, little peer interaction and passive participation in the classroom. These conditions progressively improved during the intervention, resulting in more stable attention, more independence in following the instructions and completing academic tasks, more participation in the classroom, and more active social interaction with peers. The findings of the study suggest that the integrated pedagogical intervention had a positive impact on the student's academic engagement and adaptive behaviour within the inclusive classroom setting.

The interview data also reinforced the observations. The classroom teacher explained that instructional adaptation through simplified learning materials, concrete media, repeated explanations, and individualized guidance enabled Dv to understand classroom instruction better and participate more actively in learning activities. The teacher also reported significant improvements in the student's learning independence, self-confidence and social interaction by the end of the intervention. These observations were confirmed by the school principal who stressed the school's commitment to offering flexible instructional support to students with different educational needs, while the student's parent reported positive changes in motivation to learn, independence at home and self-confidence. He enjoyed learning with pictures and concrete materials such as Dv and acknowledged that teacher help made classroom learning easier to comprehend. Overall, the interview data indicated that the integrated pedagogical intervention contributed to academic participation and positive changes in adaptive behavior, communication and social engagement.

Development of the Student's Adaptive Skills During the Implementation of the Integrated Pedagogical Intervention

One of the primary outcomes examined in this study was the development of adaptive skills. Six dimensions were assessed for adaptive skills: attention during learning, ability to follow instructions, independence in learning, participation in classroom activities, interaction with peers and communication with the teacher. Data were collected during three rounds of sequential classroom observations during the intervention period, and supplemented with interviews with the classroom teacher, student's parent, and student. This method allowed the researcher to observe not only changes in academic engagement but also gains in adaptive behaviors that support successful participation in an inclusive classroom. Classroom observations revealed a gradual enhancement in all domains of adaptive abilities throughout the intervention. Dv showed low level of adaptive functioning at the beginning of the study. It was manifested by unstable attention, frequent distraction and heavy dependence on teacher's guidance prior to learning activities. The student needed multiple prompts to understand classroom activities and relied on extensive support to complete assignments; level of participation was minimal. Social interaction was limited too since Dv mostly spoke to the student sitting near him and hardly participated in collaborative learning activities. The findings indicated that the student's adaptive behaviour was inadequate to permit independent participation in classroom learning.

The second observation showed a significant improvement after the integrated pedagogical intervention was applied. He was able to hold his attention for longer periods of time and began to understand simple instructions without the teacher having to repeat them. Learning independence also increased as the student was able to complete a larger proportion of the assigned tasks with less help. During the first observation, Dv was less involved in learning activities and participated in the classroom only by responding to simple questions. Social interaction also improved as the student started to participate in small group discussions and more interaction with peers during group work. At the last observation, Dv showed substantial improvement across all observed adaptive skill domains. The student stayed on-task for the entire instructional period, followed most classroom directions independently, and completed learning activities with considerably less teacher assistance. The student's confidence was expressed in his readiness to answer the questions during the classroom discussion and more active communication with the teacher. In addition, peer engagement was not limited to the immediate desk partner, as Dv was comfortable participating in group activities and informal interactions during classroom breaks. The behavioral changes observed indicated significant growth in both learning independence and social adaptation in the inclusive classroom environment.

The interview findings supported observational data. The classroom teacher noted that Dv was becoming more independent in completing school tasks and would often try to solve problems independently before asking for assistance. The teacher noted a significant increase in the student's ability to understand classroom directions and an increase in confidence and participation in cooperative learning activities. The teacher also noted that Dv was more willing to interact with peers and participate in classroom discussions, which was a great improvement since the beginning of the intervention. In the interview with the parent of the student similar results were found. The parent reported that gains made at school were also apparent in the home environment Dv was more self-reliant in completing homework, attempted to solve learning tasks before requesting help, and was more open about school experiences and friendships. These behavioral changes suggest that the intervention resulted in improvements not only in academic functioning but also in the adaptive behavior of the

student across settings, suggesting some degree of generalization outside of the classroom.

The findings were also supported by the answers the student gave. Dv said that he liked to learn in the classroom more than before and that he preferred lessons with pictures and concrete instructional materials because it made learning easier to understand. The student also expressed increased confidence to complete assignments independently before seeking help from the teacher and satisfaction in learning with classmates. These perceptions indicate that the integrated pedagogical intervention was effective in improving the learning motivation and self-confidence, the core components of adaptive functioning for students with intellectual disabilities. Overall, the triangulation of observational, interview and document data demonstrated that the integrated pedagogical intervention presented positive changes in Dv's adaptive skills throughout the study period. There was a consistent improvement in attention regulation, ability to follow classroom instructions, learning independence, classroom engagement, teacher-student communication and peer interaction. While these were progressive changes rather than immediate ones, the findings indicate that systematic instruction adaptation, the use of concrete learning media, individual guidance, positive reinforcement, repeated teaching, and cooperation with parents together helped to enhance the student's adaptive functioning in an inclusive elementary school classroom.

Individualized Planning of the Integrated Pedagogical Intervention

The integrated pedagogical intervention was conducted through an individualized instructional plan, designed according to Dv's learning profile. In the context of inclusive education SDN 006 Muara Bengkal, individualized planning was the foundation of instructional decision making by matching classroom expectations to the student's functional cognitive abilities. Instead of expecting Dv to achieve the same academic outcomes as his peers through uniform instruction, the classroom teacher designed a flexible learning pathway that accommodated Dv's strengths, limitations, and pace of learning. This planning process established a pedagogical roadmap for instructional adaptations throughout the intervention. The first step in the planning process is a formative assessment which is used to determine the student's educational needs, as well as the instructional supports needed for successful learning. This evaluation was unlike traditional evaluations that focus mainly on academic achievement. The purpose of this evaluation was to determine Dv's responses to various instructional stimuli, including his ability to pay attention, understand verbal instructions, interact with concrete learning materials, complete learning tasks, and respond to teacher guidance. Assessment results showed that Dv had difficulties with abstract concepts, maintaining attention during classroom instruction and self-initiating learning activities. Conversely, the student responded more to instruction when supplemented with concrete objects, visual representations, repeated explanations and individualized support. The results provided an empirical basis for designing subsequent pedagogical interventions.

The classroom teacher used the results from the formative assessment to develop an Individualized Education Program (IEP) containing curriculum modifications and attainable learning objectives. The instructional targets were altered from mastery of the entire sixth grade curriculum to functional understanding. For example, the initial instructional objectives focused on recognizing simple fraction concepts with concrete representations such as model fruits and fraction manipulatives before gradually progressing towards visual representations and simplified symbolic notation instead of expecting Dv to solve complex fraction problems. This alteration in curriculum ensured that the learning objectives were achievable and consistent with the basic skills expected in the general classroom. The weekly monitoring data showed the individualized planning was constantly improving the evidence-based instructional decision making. In Dv's first week there were minimal cognitive responses and poor attentional control, difficulty following instructions in the classroom. This was mainly attributed to the distracting nature of the regular classroom. Based on these observations, immediate changes were made, such as placing the student closer to the teacher to reduce environmental distractions. Improvements were noted in the use of visual learning cards and structured verbal prompting to increase Dv's understanding of single step instructions during the second week, however verbal explanations without visual support remained a challenge. Then by the third week, introducing peer tutoring helped improve the student's confidence and willingness to participate in learning activities. However, after approximately 7 minutes in sustained task engagement, the teacher became cognitively fatigued and employed a chunking strategy in which she chunked the learning activities into shorter segments of teaching. Thus, in the fourth week, Dv was able to maintain attention and perform the learning tasks more independently, as the positive visual feedback and reduced visual distractions in the classroom were provided, which indicated a gradual improvement in cognitive response, instructional comprehension, and attention regulation.

The longitudinal monitoring also showed that individualized planning was a dynamic not static instructional process. The teacher continuously analyzed weekly progress, rather than using assessment data only for documentation, to identify emerging barriers and adjust instructional strategies accordingly. This planning cycle shows how data-based decision making is used in inclusive education when instructional changes are based on the student's observed performance. The progressive improvement seen in all monitoring indicators supports the view that students with intellectual disabilities can demonstrate meaningful academic and adaptive development when instructional planning is responsive, individualized, and consistently revised in light of ongoing assessment evidence.

Strategic Partnership and Multilateral Collaboration with Parents

A fundamental factor for the success of the integrated pedagogical intervention was the establishment of a strategic alliance between the school and the student's family. Given the interaction between classroom instruction and the home environment, it was clear that the gains made during the intervention needed to be reinforced in the home environment to encourage generalization of newly acquired skills. For Dv, who had difficulty generalizing learned behaviors to other contexts, parental involvement was an essential extension of the instructional process and not just an emotional support. Therefore, the intervention was systematically implemented in collaboration with the classroom teacher and the student's parents to ensure continuity of school-based and home-based learning experiences. The collaborative framework was

intended to promote a consistent teaching approach across learning environments. Teachers communicated frequently through a communication notebook and weekly digital communications to share learning objectives, classroom progress, and instructional strategies that could be reinforced at home. Parents were asked to use the same brief, explicit verbal instructions as the classroom teacher, to reduce the likelihood of inconsistencies in communication that could affect the child's understanding and performance of the task. This consistency allowed the Dv to respond better to familiar instructional cues in any learning environment.

Another important aspect of the collaboration was the extension of concrete instructional materials for use outside the classroom. The teacher introduced parents to the visual cards, concrete manipulatives, and instructional aids used in classroom instruction and encouraged parents to use similar materials in home-based learning activities. This approach allowed Dv to have familiar stimuli for learning in varied contexts, which helped in grasping concepts and transfer of learning. Observation during the intervention showed that Dv was more accurate at recognizing functional symbols and learning concepts at home when the instructional media were in accordance with those used in school. Teachers and parents also shared the responsibility of positive behavioral reinforcement. They agreed to use similar types of reinforcement strategies (e.g., verbal praise and visual rewards) during Dv's demonstration of appropriate learning behaviors, completion of tasks that were independently assigned to him, or maintenance of attention during instructional activities. Where reinforcement was consistent across environments there seemed to be an increase in student compliance with academic and daily living tasks and a decrease in resistance and emotional frustration. Moreover, parents reported that Dv was more likely to begin learning activities independently prior to requesting assistance, indicating increases in self-confidence and learning autonomy.

The partnership was further strengthened by involvement in the evaluation of the Individualized Education Program (IEP). Periodic meetings between the school principal, the classroom teacher and the student's parents reviewed the student's progress, identified emerging challenges, and determined needed adjustments to instructional goals and curriculum accommodations. Collaborative evaluations also helped to ensure that educational decisions were not based on one-off classroom observations but rather on a continuous monitoring basis, thus allowing for instructional modifications to be responsive to Dv's changing needs. Overall, the results indicate that the integrated pedagogical intervention was significantly more effective when the school and family collaborated over time. Consistent use of instructional language, common use of concrete learning materials, coordinated positive reinforcement, and regular communication between teachers and parents provided coherent learning opportunities across home and school settings. This continuity was accountable not only for the improvements in Dv's participation in academic activities, but also for the attentional stability, adaptive behavior, learning independence and confidence in responding to the everyday learning demands. The results suggest that family-school partnerships are a fundamental element of effective pedagogical interventions for students with intellectual disabilities in inclusive elementary school settings.

Discussion

The findings of this study show that the use of an integrated pedagogical intervention had a positive effect on the learning process and adaptive development of a sixth-grade student with intellectual disability in an inclusive elementary school setting. The intervention was not implemented as a stand-alone instructional strategy, but as a complete pedagogical framework that included curriculum adaptation, personalized instructional support, concrete learning media, repeated and simplified instructions, positive reinforcement, ongoing progress monitoring and active collaboration with parents. The inclusion of these components allowed instruction to be more responsive to the student's learning profile, while still maintaining participation in the regular classroom. The result shows that good inclusive education cannot be achieved by uniform instruction but by systematic instructional differentiation which considers individual learning needs. The present study emphasizes the importance of individualized planning as the foundation of the intervention. The first formative assessment was useful to identify the primary obstacles to learning of Dv. They were not a resistance to learning, but a reduced cognitive processing, difficulties in keeping attention and problems in understanding abstract concepts conveyed in traditional teaching. Therefore, instructional goals were transformed into functional and achievable learning objectives by designing an Individualized Education Program (IEP). The teacher suggested a gradual approach using simplified instructional materials and concrete learning experiences instead of expecting the student to master the entire regular curriculum. This finding supports the principle that educational planning individualized to the child should be based on the child's functional abilities rather than chronological grade-level expectations. Likewise, Hadi et al. (2025) concluded that individualized educational planning offers a more realistic framework for meeting the learning needs of students with intellectual disabilities by aligning instructional objectives with their cognitive characteristics. Hallahan et al. (2022) also argue that individualized educational programming is the basis of effective instruction for learners with intellectual disabilities because it allows educational decisions to be informed by the students' developmental readiness rather than the uniformity of curricular demands.

Ongoing progress monitoring and data-based instructional decision making further enhanced the effectiveness of the intervention. Weekly monitoring allowed the teacher to evaluate Dv's response to instructional adaptations and to immediately modify teaching strategies when learning barriers occurred. For example, classroom observations found environmental distractions to have reduced the student's attentional control in the initial weeks of intervention. The teacher responded by changing the classroom seating, using peer tutoring and the chunking method for breaking down long learning tasks into smaller teaching segments. Statistically significant improvements in attention, task completion, and independence in learning were associated with real-time modifications to instruction during subsequent observations. These findings support the idea of Data-Driven Decision Making, where instructional interventions are revised in an ongoing manner based on evidence gathered during instruction, not merely on pre-existing lesson plans. Teachers can more responsively adjust instruction to students' changing educational needs through continuous progress monitoring, thus

enhancing the effectiveness of individualized interventions in inclusive classrooms (Blackwell & Rossetti, 2014).

A further important finding relates to the effectiveness of concrete instructional media and individual teacher support in enhancing conceptual understanding. Throughout the intervention, the teacher used pictures, visual cards, concrete manipulatives and real-life objects consistently to make the abstract concepts observable learning experiences. These instructional supports helped Dv to stay on task longer, to more accurately understand classroom instructions, and to participate more actively in learning activities. Meanwhile the one-to-one guidance gradually shifted from intensive teacher support to more student independence as Dv showed increasing competency in performing learning tasks. This gradual removal of support is an example of the educational idea of instructional scaffolding, in which help is systematically removed as learners develop a greater ability to do tasks independently. These results are consistent with the findings of Kismawiyati (2022) who concluded that continuous pedagogical intervention supported by concrete learning experiences significantly improves both academic participation and adaptive functioning of students with intellectual disabilities. Vygotsky's Zone of Proximal Development likewise implies that with well-structured assistance, learners are able to operate beyond their current level of independent functioning until mastery is internalized gradually.

In addition to improving academic engagement, the intervention was linked to meaningful changes in adaptive behavior. The observational data showed progressive improvement in attentional regulation, ability to follow classroom instructions, learning independence, participation in the classroom, communication with teachers and peer interaction. Initially, Dv showed passive classroom behavior, low social involvement and high dependency on teacher's help. But these behaviours slowly grew into more participation in class, more confidence in answering questions, more independence in doing assignments, and more interaction with classmates. These findings indicate that intentional practices integrating cognitive, behavioral, and social supports in the context of everyday classroom learning can systematically improve adaptive behavior. Jacob and Edozie (2022) also found that structured educational interventions significantly improve communication skills, adaptive behavior, social participation and emotional regulation among individuals with intellectual disabilities. Moreover, as Schalock et al. (2021) pointed out, adaptive behavior should be considered a dynamic developmental construct that responds positively to systematic environmental supports rather than a static characteristic that is solely determined by intellectual functioning.

A distinguishing contribution of this study is the emphasis on family-school collaboration as part of the intervention rather than as supplementary support. Results indicated the consistency of instruction across school and home increased the generalization of newly acquired adaptive skills. Parents were actively involved in the implementation of the student's individualized learning program through communication notebooks, regular consultations, consistent verbal prompting, shared use of concrete learning materials, and coordinated positive reinforcement. This cooperation helped to eliminate inconsistencies between home and school and reinforce new behaviors in both places. The results support Bronfenbrenner's Ecological Systems Theory that children's development is best nurtured when the major microsystems influencing their lives, particularly family and school, are aligned and reinforce each other. Bronfenbrenner and Morris (2006) propose that developmental outcomes are improved when interactions between ecological contexts are characterized by continuity and shared expectations. In addition, Pujaningsih (2006) says that the cooperation between teachers and parents should cover the assessment, individualized educational planning, program monitoring and home learning support to achieve the best educational outcomes for children with learning difficulties.

In general, the results of the study confirm that the efficiency of integrated pedagogical intervention in inclusive education depends on the interrelation of a number of teaching components, and not on individual teaching methods. Individualized assessment is the basis for determining functional learning needs, accommodations for instructional access, monitoring for evidence-based instructional modifications, concrete learning media for enhanced conceptual understanding, scaffolding to foster independent learning, and a sustained family-school partnership to reinforce the transfer of adaptive skills across environments. These interrelated processes show that inclusive education cannot assume that students with intellectual disabilities will simply fit into standardized curricular expectations, but rather that educational systems need to be flexible and responsive to the characteristics of individual learners. Therefore, the present study provides empirical support for integrated pedagogical intervention as a holistic and feasible approach to improve academic engagement and adaptive functioning among students with intellectual disability in inclusive elementary school settings.

CONCLUSION

Based on the findings of this study, it can be concluded that the implementation of an integrated pedagogical intervention for a sixth-grade student with an intellectual disability at SDN 006 Muara Bengkal was conducted by integrating curriculum adaptation, using concrete learning media, individualized instruction, repeated and simplified directions, positive reinforcement, and consistent cooperation between the teacher and the parents of the student. The intervention was planned systematically by first identifying the learning needs, characteristics, and functional abilities of the student, and then designing individualized instructional strategies and appropriate curriculum accommodations. This integrated intervention enhanced the student's adaptive functioning. The student showed improved attention during learning activities, improved ability to follow classroom instructions, increased independence in completing academic tasks, more active participation in classroom learning and improved interaction with teachers and peers. The implications of the findings suggest that effective inclusive education for students with intellectual disabilities requires individualized, ongoing and collaborative pedagogical practices that promote both academic and adaptive developmental needs. Accordingly, it is recommended that teachers continue to work on learner-centered instructional modifications based on individual student features; schools should enhance inclusive education by providing adequate instructional resources and continuous professional development for teachers; parents are recommended to maintain active partnerships with schools to improve

learning at home; and future researchers are recommended to explore integrated pedagogical interventions with more diverse participants, longer intervention durations, and different methodological approaches to generate more comprehensive evidence regarding their effectiveness for students with intellectual disabilities.

References

1. Abubakr, a. (2023). Intervention strategies for students with specific learning disabilities : a systematic literature review. *Journal of positive school psychology*, 7(12), 50–61.
2. Address, s., ver, k., & master, l. (2023). Educational intervention and its application in the development of higher-level self- learning skills. *South florida journal of development*, 4, 2954–2965. <https://doi.org/10.46932/sfjdv4n8-002>
3. Hermanto, & Pamungkas, B. (2025). *Manajemen pendidikan inklusif: Suatu pendekatan teoritis dan praktis*. Yogyakarta: UNY Press
4. Anggraini, e., wandira, a., andriani, o., novalia, r. J., studi, p., guru, p., dasar, s., muhammadiyah, u., & bungo, m. (2023). Tingkat layanan intervensi dalam pendidikan anak berkebutuhan khusus terintegrasi. *Jurnal pendidikan vokasi dan seni*, 2(1), 88–92.
5. Anidi. (2022). Permasalahan anak disabilitas intelektual dan disabilitas mental di sekolah. *Arus jurnal pendidikan (ajup)*, 2(3).
6. Damastuti, e., yuwono, i., jaleha, s., & wulandari, r. (2025). Development of application of self-help skills for children with intellectual disability in a wetland environment. *Jurnal inovasi teknologi pendidikan*, 12(3), 317–329.
7. Guo, p., carey, e., plaisted-grant, k., & cheke, l. G. (2024). Episodic memory during middle childhood: what is developing. *Journal of experimental child psychology*, 240, 105828. <https://doi.org/10.1016/j.jecp.2023.105828>
8. Hadi, m. S., zanawi, a., & zulkarnain. (2025). Implementasi strategi pembelajaran individual terstruktur bagi anak tuna grahita ringan di sekolah dasar inklusi. *Jurnal ilmiah mutiara pendidikan*, 3(3), 1–12.
9. Hin, k., chan, w., cunha, j., martins, j., peseta, r., & rosário, p. (2023). A self-regulation intervention conducted by class teachers : impact on elementary students ' basic psychological needs and classroom engagement. *Frontiers in psychology*, november. <https://doi.org/10.3389/fpsyg.2023.1220536>
10. Jacob, u. S., & edozie, i. S. (2022). Skills of individuals with intellectual disability : a systematic review. *Frontiers in rehabilitation sciences*, 3. <https://doi.org/10.3389/fresc.2022.968314>
11. Jailani, m. S. (2023). Teknik pengumpulan data dan instrumen penelitian ilmiah pendidikan pada pendekatan kualitatif dan kuantitatif. *Jurnal pendidikan islam*, 1, 1–9.
12. Kismawiyati, r. (2022). Implementasi program intervensi dini pada peserta didik berkebutuhan khusus dengan hambatan intelektual di sekolah paud inklusi jember. *Jurnal uniper jember*, 5(2), 95–101. <https://doi.org/10.31537/speed.v5i2.635>
13. Lase, asas e., shidqi, t. S., & rahmatrisilvia. (2025). Intervention design for students with intellectual disabilities vasas elkasih. *Jurnal pendidikan inklusi*, 9(1), 14–21.
14. Lubis, r., syafitri, n., maylinda, r. N., alyani, n., anda, r., zulfiyanti, n., & surbakti, o. Z. (2023). Pendekatan behavioristik untuk anak disabilitas intelektual sedang. *Jurnal obsesi : jurnal pendidikan anak usia dini*, 7(2), 1626–1638. <https://doi.org/10.31004/obsesi.v7i2.4161>
15. Maravilla, g., maría, l., & angélica, r. (2022). The benefits of educational intervention in the school context los beneficios de la intervención educativa en el contexto escolar. *Journal of teaching and educational research*, 8(22), 22–28. <https://doi.org/10.35429/jter.2022.22.8.22.28>
16. Maria, d., & spyridoula, k. (2025). Inclusive pedagogical intervention program for a student with adhd and co-occurring emotional difficulties. *International journal of social science and human research*, 08(07), 5334–5338. <https://doi.org/10.47191/ijsshr/v8-i7-50>
17. Mauliddiyah, i., & permata, s. D. (2025). Strategi pembelajaran untuk anak berkebutuhan khusus disekolah dasar inklusif. *Jurnal pendidikan inklusi citra bakti*, 3, 33–41.
18. Mcleod, s. (2025). Piaget's theory and stages of cognitive development. *Simply psychology*. <https://www.simplypsychology.org/piaget>
19. Musyarrofah, s. (2024). Evaluasi terhadap intervensi sekolah luar biasa beringin bhakti dalam penanganan anak dengan intellectual disabilities. *Genfabet: jurnal pendidikan dasar*, 1(1), 25–31.
20. Naeemy, m. I., & yoneda, h. (2021). Students with intensive needs in an inclusive education system: a literature review. *Journal of icsar*, 8(2), 204–229.
21. Normawati, y. I., cahyani, l. A., muhammadiyah, u., aceh, m., & maret, u. S. (2024). Identification and assessment of children intellectual disability in inclusive school. *Jurnal orthopaedagogia*, 2.
22. Nursalim, m., & rahmasari, d. (2023). Problems of children with intellectual and mental disabilities at school. *Sentra cendekia*, 4(2), 80–92.
23. Purwandari, e. (2024). Keterampilan sosial siswa usia dini dengan hambatan intelektual di sekolah inklusi. *Edukatif: jurnal ilmu pendidikan*, 6(4), 2906–2915.
24. Qondias, d., bhaghi, f. N., & azi, a. (2025). Analisis kesulitan belajar pada anak berkebutuhan khusus pada sekolah luar biasa negeri bajawa. *Urnal pendidikan inklusi citra bakti*, 3, 102–115.
25. Safarudin, r., kustati, m., & sepriyanti, n. (2023). Penelitian kualitatif. *Innovative: journal of social science research*, 3, 9680–9694.
26. Setiana, & eliasa, e. I. (2024). Karakteristik perkembangan fisik, kognitif, emosi sosial, dan moral pada anak usia sekolah dasar (7-12 tahun). *Journal of human and education*, 4(6), 127–138.
27. Pujaningsih, P. (2006). *Penanganan Anak Berkesulitan Belajar: Sebuah Pendekatan Kolaborasi dengan Orangtua*. JPK (Jurnal Pendidikan Khusus), 2(2).
28. Siahaan, m. K. (2022). Education for children with special needs. *The explora*, 2, 14–27.
29. Sonia, & devi, s. S. (2023). People with intellectual disabilities-an approach towards management issues.

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International journal of advanced research (ijar), 11(11), 1125–1130. <https://doi.org/10.21474/ijar01/1791830>. Wardani, h. K. (2022). Pemikiran teori kognitif piaget. Khazanah pendidikan-jurnal ilmiah kependidikan (jik), 16(1), 7–19. <https://doi.org/10.30595/jkp.v16i1.12251>