

Developing a Quality Improvement Model for Special Schools (SLB) Serving Children with Special Needs: An Observational Study

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Abstract. This study aims to develop a comprehensive quality improvement model for Special Schools (SLB) that serve children with special needs, employing an observational research approach conducted at SLB YPAC Medan. The study is grounded in the understanding that educational services for children with special needs require adaptive, inclusive, and holistic strategies to effectively address their diverse learning characteristics and developmental needs. Through systematic observation, this research examines several critical aspects, including instructional practices, the adequacy and accessibility of school facilities, teacher competence, the integration of therapeutic interventions, and the quality of social interaction among students within the school environment. The findings indicate that current educational practices still face notable challenges, particularly in delivering individualized instruction that aligns with the unique cognitive, emotional, and physical needs of each student. Individualized learning is a fundamental principle in special education, as it enables educators to tailor instructional strategies, learning materials, and assessment methods to maximize each learner's potential. In addition, the study highlights the importance of developing adaptive learning environments that are not only physically accessible but also psychologically supportive and responsive to students' sensory and behavioral needs. Moreover, the implementation of an inclusive curriculum requires further strengthening to ensure flexibility in content delivery, teaching methods, and assessment practices that accommodate diverse learners. Teacher competence also emerges as a key determinant of educational quality, emphasizing the necessity for continuous professional development programs that enhance teachers' expertise in special education, classroom management, and collaborative practices. Another important finding is the need to effectively integrate therapeutic services, such as speech therapy, occupational therapy, and physiotherapy, into the learning process to support students' holistic development. Based on these findings, this study proposes a Quality Development Model for Special Schools (QDMS-SLB), which integrates academic, emotional, and social dimensions into a cohesive and sustainable framework. This model is designed to improve institutional performance, strengthen inclusive practices, and promote effective, equitable, and student-centered learning environments for children with special needs.

Keywords: Special School, Children with Special Needs, Quality Improvement, Educational Model, Observation.

1 Introduction

Education for students with special needs is an integral part of an equitable and inclusive education system. Learners with intellectual disabilities and other developmental challenges require structured, concrete, and repetitive instructional approaches to understand concepts and acquire functional life skills [1]. In special education practice, teachers frequently apply imitation and compliance-based strategies to establish basic behaviors, simple academic skills, and self-regulation. These strategies are aligned with behaviorist principles that emphasize reinforcement and observational learning [2]. However, recent educational research indicates that instruction focusing solely on mechanical imitation and compliance may lead to superficial learning if it is not accompanied by meaning-making, contextual understanding, and connections to real-life experiences [3]. Students may be able to follow instructions or replicate actions without fully understanding the purpose or function of the activity. This issue represents a significant challenge in special education, where the ultimate goals extend beyond behavioral order toward independence, functional understanding, and social participation [4]. Furthermore, the current educational framework in Indonesia emphasizes student-centered, contextual, and meaningful learning. These principles require teachers not only to deliver procedural instruction but also to support learners in constructing understanding through direct experiences, concrete and visual media, and real-life activities [5]. In special schools, this demand becomes more complex because teachers must adapt instruction to each learner's characteristics, including differences in cognitive level, language ability, motor skills, and socio-emotional development.

Studies in special education also highlight that individualized approaches, experiential learning, and the use of concrete-visual media significantly improve conceptual understanding and adaptive skills in students with intellectual disabilities [6]. This evidence suggests that imitation and compliance-based methods should be expanded into more reflective and meaningful learning processes so that they promote not only behavioral responses but also comprehension and skill transfer to daily life contexts.

Based on these conditions, this research is important because it seeks to examine imitation and compliance-based instructional practices in special schools and explore how these strategies can be developed into more meaningful learning for students with special needs. This study is relevant for strengthening the pedagogical competence of special education teachers, particularly in designing instruction that balances structure, behavioral reinforcement, and the development of learning meaning.

Practically, the findings of this study are expected to support special school teachers in developing more contextual and adaptive teaching strategies. Theoretically, this research contributes to discussions on transforming behaviorist-oriented instruction into meaningful learning approaches in special education. Ultimately, this study supports efforts to improve the quality of education for students with special needs so that they not only comply with instructions but also understand, become more independent, and actively participate in social life.

Recent international studies emphasize that quality development in special and inclusive education must integrate instructional practice, teacher competence, and systemic support. A critical realist model highlights the interaction between policy context, pedagogy, and learner needs in inclusive settings [7]. Research on innovation in teacher training for special schools

shows that continuous professional development significantly improves instructional quality and student support systems [8]. Furthermore, the quality of special education teachers, supported through effective recruitment and professional systems, directly influences learning outcomes in inclusive environments [9]. Teachers' roles as facilitators, motivators, and mediators are also proven essential in supporting learners with special needs [10]. Supporting factors such as adaptive curriculum, infrastructure readiness, and school leadership are identified as core components of inclusive education quality models [11].

2 Method

This study employed a descriptive qualitative approach using observation as the primary data collection technique. Descriptive observation is used to systematically describe events, behaviors, and situations that occur naturally in the research setting without manipulation of variables [12]. This approach is appropriate for educational research because it allows researchers to obtain real and contextual data about teaching practices, learning environments, and social interactions within schools [13].

Research Setting and Participants

The research was conducted in a special school that serves students with intellectual disabilities. The school accommodates 75 students with intellectual disabilities who receive educational and therapeutic services. The learning process is supported by 24 teachers and 6 therapists who work collaboratively to provide academic instruction, behavioral support, and therapeutic intervention. These participants were not treated as research subjects in an experimental sense, but as natural actors observed within the educational environment.

Data Collection Technique

Data were collected through non-participant observation. The researcher observed school activities without directly intervening in the instructional process. Observation focused on four main aspects:

1. Teaching and learning activities in classrooms, including instructional strategies, teacher–student interaction, and student engagement.
2. School infrastructure and learning facilities, such as classrooms, therapy rooms, learning media, and supporting environments.
3. Therapeutic services provided to students, including speech therapy, occupational therapy, and other supportive interventions.
4. Interaction among stakeholders, including teachers, therapists, school staff, students, and parents.

Observations were conducted repeatedly during school hours to ensure data consistency. The researcher used an observation guideline and field notes to record events, behaviors, and contextual conditions. Field notes are important in observational research because they capture both descriptive information and reflective insights [14].

Data Validity

To enhance the trustworthiness of the data, prolonged engagement and persistent observation were applied. Repeated observations allow the researcher to gain a deeper understanding of the

setting and reduce misinterpretation [15]. Triangulation of observation aspects—teaching activities, infrastructure, therapy services, and social interaction—also strengthens the credibility of findings.

Data Analysis

Data analysis followed descriptive qualitative procedures. Observation data were organized, categorized, and interpreted to identify patterns related to instructional practices, environmental support, and stakeholder collaboration. The analysis emphasized describing the real conditions of the school environment rather than testing hypotheses.

3 Results and Discussion

This study's observational data indicates that classroom instruction at the special school often relies on imitation and compliance strategies to achieve behavioral and basic academic outcomes. While these techniques are effective for establishing routine and immediate task performance, contemporary literature warns that relying primarily on imitation/compliance risks producing surface-level learning without functional transfer to daily life or development of higher-order understanding. Therefore, observations suggest a need to complement behaviorally oriented strategies with approaches that scaffold meaning and generalization for students with intellectual disabilities.

Universal Design for Learning (UDL) provides a useful theoretical framework to expand the observed practices. UDL's core principles—multiple means of engagement, representation, and action/expression—encourage teachers to design lessons that offer varied entry points and ways to demonstrate learning, thereby reducing barriers created by single methods of instruction. Applying UDL in the observed classrooms could mean combining modeled/imitative instruction with multisensory materials, visual supports, and alternative response formats so that students not only replicate behaviors but also understand purpose and context.

Evidence-based practice reviews for students with intellectual and severe disabilities emphasize individualized, contextualized, and experiential learning strategies. For example, teaching that integrates concrete, functional tasks (e.g., daily living skills) with systematic prompting and fading enhances both skill acquisition and generalization. Observational data showing frequent repetition and adult-led modeling can be reframed: retention can be retained through systematic prompting hierarchies while introducing opportunities for choice-making and problem solving to develop independence.

Therapeutic services observed—speech therapy, occupational therapy, and physiotherapy—are assets for an interdisciplinary model that supports functional learning. Contemporary family-centered and multidisciplinary models recommend integrating therapy goals with classroom activities and involving caregivers in routines so that therapy gains translate to natural environments [16]. Observations that therapy occurs in separate sessions could be extended by collaborative planning (teacher–therapist co-taught mini-sessions, carry-over routines) to maximize transfer.

Stakeholder interaction in the school (teachers, therapists, administration, parents) appeared collegial but could be strengthened through structured professional learning and shared

frameworks (e.g., UDL checklists, evidence-based practice protocols). Professional development focused on lesson adaptation, prompting hierarchies, data-based decision making, and strategies for generalization will likely improve instruction quality and student outcomes.

In sum, the data suggest a practical pathway: retain effective elements of imitation and reinforcement (which provide structure and immediate behavioral gains) while embedding these within UDL-informed lesson design, explicit teaching for functional understanding, and interdisciplinary carry-over strategies that involve families. This combined approach aligns with contemporary evidence emphasizing individualization, contextualization, and ecological validity of interventions for students with intellectual disabilities [17].

3.1 Proposed quality development model (qdms-slb)

The QDMS-SLB model is structured as an integrated quality improvement framework that combines individualized instruction, emotional and social support systems, adaptive infrastructure, and continuous professional development into a unified institutional strategy. Individualized instruction ensures that learning content, methods, pacing, and assessment are tailored to the cognitive abilities, behavioral characteristics, and functional needs of each learner with special needs, enabling meaningful engagement and achievable learning outcomes. This pedagogical approach is reinforced by emotional and social support systems that cultivate positive teacher–student relationships, structured routines, behavioral guidance, and therapeutic integration, all of which contribute to students’ emotional security, social adaptation, and readiness to learn. The model is further strengthened by adaptive infrastructure, including accessible classrooms, therapy rooms, vocational training spaces, and learning resources designed to accommodate diverse physical and developmental conditions, thereby creating an enabling environment for holistic development. Complementing these dimensions, continuous professional development functions as the driving force of institutional quality, equipping teachers and therapists with updated competencies, reflective practices, and collaborative skills necessary to implement adaptive pedagogy effectively. Together, these four interconnected components operate systemically to enhance instructional effectiveness, student well-being, and overall institutional performance in special education settings.

4 Conclusion

Quality improvement in special schools (SLB) cannot be achieved through isolated pedagogical adjustments, but instead demands a coherent integration of academic instruction, therapeutic intervention, and social–emotional support within a unified institutional system. Learners with special needs experience education as a holistic process in which cognitive development, behavioral regulation, communication skills, and social adaptation are deeply interconnected; therefore, school quality must be conceptualized beyond academic achievement alone. The QDMS-SLB model responds to this complexity by positioning individualized instruction, structured emotional–social support, adaptive infrastructure, and continuous professional development as mutually reinforcing dimensions of institutional practice. Through this systemic alignment, instructional strategies become more responsive, therapeutic services more pedagogically connected, and school environments more accessible and supportive, ultimately enhancing both learning outcomes and student well-being. Thus, the model not only strengthens internal quality assurance mechanisms but also advances inclusive institutional development by

transforming special schools into adaptive, learner-centered organizations capable of sustaining long-term educational effectiveness.

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